e Itlimina I

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.]

No. 2565 .- Vol. LIV.

LONDON, SATURDAY, OCTOBER 18, 1884.

SIXPENCE. SUPPLEMENT. | PRICE SIXPENCE.
BY POST, £1 45. PER ANNUM

MR. JAMES H. CROFTS, STOCK AND SHARE DEALER, No. 1, FINCH LANE, CORNHILL, LONDON, E.C. ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING STOCKS and SHARES (British and Foreign), Consols, Banks, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares. BUSINESS negotiated in STOCKS and SHARES not having a general

market value.

Berry Friday a GENERAL and RELIABLE LIST issued (a copy of which will be forwarded on application), containing closing prices of the week.

MINES INSPECTED.

BANKERS: CITY BANK, London—BOUTH CORNWALL BANK, St. Austell.

TELEPHONE NUMBER 1003.

SPECIAL DEALINGS in the following (or part):—

| 100 Asia Minor, 3s. | 200 Guinea Coast Gold, offer wanted. | 35 Phanis United, 28s 9 | 36 Balisis, 4s, 9d. | 36 Bartaberg, 25s. | 36 Cankim Bamoo, 2s. | 37 Cankim Bamoo, 2s. | 38 Can Camborne. | 38 Cankim Bamoo, 2s. | 38 Cankim Bamoo, 2s. | 39 Consolidated, 2s. | 30 Colorado, 2t. 18s. 9d. | 30 Colora

* SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MOSTIS) ON DEPOSIT OF TWENTY PER CENT.

* BUSINESS at CLOSE PRICES in all Market TIN, COPPER, LEAD, GOLD, SILVER, and DIAMOND SHARES JAMES H. CROPTS, 1, PINCH LANE, LONDON.

RAILWAYS — SPECIAL BUSINESS.— Fortnightly Accounts opened on receipt of the usual cover.

JAMES H. CROPTS, 1, FINCH LANE, LONDON.

FOREIGN BONDS - SPECIAL BUSINESS. - Fortnightly accounts opened on receipt of the usual cover. JAMES H. CROFTS, 1, FINCH LANE, LONDON.

A MERICAN AND CANADIAN STOCKS AND SHARES—
BYECIAL BUSINESS.

Formightly Accounts opened on receipt of the usual cover. Accounts opened on receipt of the usual cover.

JAMES H. CROPTS, 1, PINCH LANE, LONDON.

OPTIONS in all STOCKS and SHARES dealt in.-JAMES H. OROFTS, 1, FINCH LANE, LONDON.

HOME MINES TRUST.—For SPECIAL SALE:—100 shares at 238. 6d. net for three months' forward delivery, subject to 20 per cent. deposit.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

GOLD AND SILVER MINES.—SPECIAL BUSINESS in ALL California, Potosi, Ohite, Nouveau Monde, Ruby, Richmond, Victoria.

**SHARES IN THE ABOVE SOLD FOR FORWARD DELIVERY ONE, TWO, OR THEEE MONTHS ON DEPOSIT OF TWENTY PER CENT.

JAMES H. OROFTS, 1, FINCH LANE, LONDON.

MISCELLANEOUS SHARES of all DESCRIPTIONS BOUGHT or SOLD—SPECIAL BUSINESS:—Brighton Aquarium, General Oredit, 's Bay, Native Guano, Suez Canal, Westminster Aquarium, and Hotel

SHARES SOLD for FORWARD DELIVERY, ONE, Two, or Three Months, or Deposit of Twenty Per Cent.

JAMES H. CROFTS, 1, PINCH LANE, LONDON.

PALKIS SHARES.—SPECIAL BUSINESS at CLOSE MARKET FRICES either for CASH or FORWARD DELIVERY one, two, or three months.

JAMES H. GROFTS, 1, FINCH LANE, LONDON.

TRANSVAAL GOLD AND SOUTH AFRICAN DIAMOND PIELDS, SPECIAL BUSINESS in all Transval Shares, including BALKIS, MEBON-BERLYN, TRANSVAAL, SPITZKOP, SOHWAB'S GULLY, KIMBELEY VORTH BLOOK, and KIMBERLEY ORNTRAL. ** SHARES IN THE ABOVE SOLD FOR FORWARD DELIVERY ON DEPOSIT OF TWENTY PER CENT.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

ESTABLISHED 1842. M. B. W. B. COBB, 29, BISHOPSGATE STREET WITHIN, LONDON.

Special information and business in all mines in the United States of Colombia, and other gold and silver mines in that company, Western Andes, Colombian, and other gold and silver mines in

as country.

Is direct communication each mail with the highest mining authority in clembia, through whose private advices I am able to give most valuable infor-ation as to mines in the Tolima district, and other mines in the country.

M. B. W. MARLBOROUGH, STOCK AND SHARE DEALER, 29, BISHOPSGATE STREET, LONDON, E.O. (Established 30 Years), Gan SELL the following SHARES:

Akankoo, 68, 20 Ecton, £2 29, 9d. 20 Oscar Gold, 10s paid, Eberhardt, 58, 6d. 25 Birdseye Oreek, 13s. 25 Geneed, 28, 25 Geneed, 28, 25 Geneed, 28, 25 Geneed, 28, 27 Foot Fbillip, 22, 2d. 26 Colombian Hyd., 93d. 100 Kapanga, 28, 26 Colifornia Gold, 11s. 0 20 Leadhills, £1 19s. 6d, Chontalco, 18, 9d. 20 Leadhills, £1 19s. 6d, 20 Prince of Wales, 8s 3d 50 Contago, 18, 9d. 20 Marke Valley, 11s, 3d. 20 Deaver Gold, 28, 20 Deaver

BRITISH AND FOREIGN MINING OFFICES. MESSES. PETER WATSON AND CO.,

18, AUSTIN FRIARS, OLD BROAD STREET, LONDON, E.C. BANKERS: THE ALLIANCE BANK (Limited).

MESSES. PETER WATSON AND CO.'S
BRITISH AND FOREIGN MONTHLY MINING NEWS-STOCK
AND SHARE INVESTMENT NOTES—MINES, MINERALS, AND
METAL MARKETS—SHARE LIST, NO. 855, Vol. XVII., for OOTOBER
month, is ready, and will be sent to customers on application.

Annual Subscription...... 5s. | Single Copy.....

M R. ALFRED E. COOKE, BRITISH AND FOREIGN STOCK AND SHARE DEALER, 9, OLD BROAD STREET, LONDON. ESTABLISHED 1853.

(Opposite the Stock Exchange, with which his offices are in DIRECT TELEGRAPHIC COMMUNICATION.) TELEPHONE No. 1268.

TELEPHONE No. 1268.

Mr. Alfred E. Cooke can Sell the following shares, or any smaller marketable number at prices affixed FREE of COMMISSION:—

55 Almada, 3s. 6d.

100 Home Mines Trust, 180 Potosi, 6s. 3d.

100 Home Mines Trust, 180 Potosi, 6s. 3d.

100 Balkis, 4s. 9d.

23s. 9d.

23s. 9d.

55 Clailao Bis, 8s. 6d.

40 Chile Gold, 2s. 6d.

250 Colombian Hyd., 9s. 6

30 Chontales, 3s. 9d.

100 Cor. South Australian

Copper, 1s. 6d.

50 New Caradon, 2s. 3d.

100 New Caradon, 2s. 3d.

100 New Kitty, 23s.

100 New Kitty, 23s.

100 New Kitty, 23s.

100 New Caradon, 3s.

100 New Caradon, 2s.

100 New Caradon, 3s.

100 New Caradon, 3s.

100 New Caradon, 3s.

100 New Caradon, 2s.

100 New Caradon, 2s.

100 New Caradon, 3s.

MANY OF THE ABOVE SHARES WILL BE SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TEN OR TWENTY PER CENT.

These shares were specially recommended at 2s, 9d. Price now 4s, 9d. CLOSE BUSINESS FOR CASH, FORTHIGHTLY ACCOUNT, or FORWARD DELIVERY,

Mr. COOKE has correspondents in every important city and town in England, thereby he can deal in Local Shares of every description.

Daily and Weekly Lists of Prices issued to clients on application.

ADVANCES MADE ON STOCKS AND SHARES. Letters and Telegrams receive immediate personal attention. BANKERS: ROYAL EXCHANGE (Limited), Cornhill, London

BALKIS.

PECULATION OR INVESTMENT. — If you require to do business in RAILWAYS, FOREIGN STOCKS, MINING, or MISCELLA-NEOUS SHARES, apply to ALFRED E. COOKE, 9, OLD BROAD STREET, LONDON. ESTABLISHED 1853.

TELEPHONE No. 1268. NO ONE CAN DEAL ON BETTER TERMS.

MR. JAMES STOCKER, STOCKBROKER, 2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

A ready Market at closest prices for Buyers or Sellers of Shares in British Mines; also Foreign Gold and Silver; and Miscellaneous Stocks and Shares, British and Foreign Funds, Rallway Stocks, &c., for cash or account.

BANKERS: LONDON AND WESTMINSTER, Lothbury, E.C.

ESTABLISHED 35 YEARS. JOHN RISLEY, STOCK AND SHAND MINING SHARE DEALER, 38, CORNHILL, LONDON, E.C. ESTABLISHED 1860. SHARE BROKER

BANKERS: LONDON and WESTMINSTER, Lothbury, E.C.

CHARLES J. SIMS, STOCK AND SHARE DEALER,
3, UNION COURT, OLD BROAD STREET, LONDON, E.C.
Special Business in BALKIS shares,

MR. W. TREGELLAS, 40, BISHOPSGATE STREET WITHIN, E.C., Deals in all descriptions of STOCKS and SHARES at close market prices

MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS. 85, GRACECHURCH STREET, LONDON, E.C. ESTABLISHED 1862. BANKERS: LONDON AND WESTMINSTER, Lothbury, E.C.

T. LETCHER, JUN., MINE SHAREBROKER, REDRUTH, TRANSACTS BUSINESS at close prices in all CORNISH MINES.

Advice and information to intending investors.

JOHN B. REYNOLDS, STOCK AND SHARE DEALER, 37, WALBROOK, LONDON, E.C. Established Twenty-rive Years. BANKERS: LONDON JOINT-STOCK.

WEST KITTY, TREVAUNANCE, NEW KITTY, WEST POLBREEN, AND POLBERRO.

WEST KITT, THEVAUNANUE, NEW KITT, WEST FOLDREEN,
AND POLBERRO.

For prospect of trade, tin markets, management of mines, rich districts, &c., see verbatim reports of meetings of these companies, recently held, supplied gratis on application to Mr. Reynolds.

300 per cent. per annum on capital as the result of investments recommended by Mr. Reynolds, and other particulars. See Mr. Reynolds's "Facts and Figures, also supplied gratis on application to him.

The present is a very opportune moment for the investment of money in securities of all descriptions.

Mr. Reynolds is a buyer of any part of 1600 Polberro shares at 39s. each, and is a seller of a limited number to any of his customers at 42s. 6d. each. Designs are offering 2s, per share for the option of buying Folberros in two years hence at £7 10s. each.

Mr. Reynolds is also a buyer of any part of 500 Trevaunance shares. Correspondents will kindly state number and lowest price for cash.

Mr. Reynolds transacts business with promptitude at net prices for cash only

POLBERRO, ST. AGNES.

POLBERRO, ST. AGNES.

The shares of this mine are in favour, and will advance probably to a very high figure. The mine has been inspected by gentlemen who are well known, and whose opinions are universally respected. Mr. REYNOLDS will be happy to furnish the particulars of their report, and to give to his correspondents any information in his power. The books of the company and all other particulars are open for inspection at the company's offices. The management is the same as that of West Kitty, and the property promises to be of a very high order. Mr. REYNOLDS directs attention to the fact that those who have purchased the shares can already obtain a fair profit. Mr. REYNOLDS further directs attention to the fact of his having been the first to introduce West Kitty, under very similar circumstances to those which now characterise Polberro, St. Agnes, and Mr. REYNOLDS with equal confidence recommends the latter company's shares. West Kitty, with at present 12s. per share paid, returns 30s. per share per annum as a minimum dividend with every prospect of further increase. When West POLBREEN.—Mr. REYNOLDS is a buyer of any part of 1000 shares at 12s. 6d. per share.

MR. WILLIAM H. BUMPUS, STOCK BROKER AND MINING SHARE DEALER, 44, THREADNEEDLE STREET, LONDON, E.C. Established at this Address in 1867.]

BUSINESS transacted in ALL STOCK EXCHANGE SECURITIES. MINING and MISCELLANEOUS SHARES of every description in INVESTMENT LIST free on application.

An INVESTMENT LIST free on app

SPECIAL BUSINESS in the undermentioned:

50 Akankoo, 6s. 6d.
40 Bratsberg, 25s.
5150 Balkis, 4s. 9d.
20 Bedford United, 23s9d.
150 Chontales, 3s. 3d.
150 Callao Bis, 9s.
150 Casta Biu Hills, 5s.
150 Casta Biu Hills, 3d.
150 Casta Biu Hills, 5s.
150 Casta Bius, 5s.
150

Where prices are not inserted offers may be made.

100 Oscar Gold, 18s. 9d.
70 Old Shepherds, 14s.
50 Organos, 10s. 6d.
20 Panulcillo, 23½.
25 Polberro.
70 Prince of Wales, 7s9d.
100 Potosi, 7s.
20 Richmond, £4.
20 Ruby (New), 7s. 6d.
100 South Caradon, 16s. 3d.
75 Transvaal, 19s.
50 Trevaunance.
15 U. Mexican, £3 13s 9.1
100 Victoria Gold, 6s. 9d.
50 West Godolphin, 21s.
10 Wheal Grenville, £3½.
50 Wheal Crebor, 22s.9d.

"a" The present is a most favourable opportunity for investing in SOUND MINING SECURITIES, a jedicious purchase of which at the low prices now ruling will, in all probability, result in large profits within the next few months. Mr. BUMPUS devotes SPECIAL ATTENTION to LEGITIMATE MINES, and is in a position to afford reliable information and advice to intending investors and others in the selection of Shares either for INVESTMENT or SPECULATION. Correspondence invited. ESTABLISHED 1867.

C H A R L E S T H O M A S, MINING AGENT AND ENGINEER, 3, GREAT ST. HELEN'S, LONDON, E.C.

M R. A L F R E D T H O M A S, MINING ENGINEER, AND STOCK AND SHARE DEALER, 0, COLEMAN STREET, LONDON, E.C.

ESTABLISHED 1852. MR. HENRY J. TALLENTIRE, STOCK BROKER AND MINING SHARE DEALER.

SPECIAL BUSINESS in all Home and Foreign Mines at close prices.

OCTOBER CIRCULAR on application, containing valuable information and advice to Investors, post free.

SHARES SOLD for forward delivery in one to three months upon usual

OFFICES-21, THREADNEEDLE STREET, LONDON, E.C. BANKERS: CITY BANK, Threadneedle-street, E.C..

MR. J. GRANT MACLEAN, SHAREBROKER AND IRONBROKER, STIRLING, N.B., Refers to his Share Market Report on page 1207 of to-day's Journal.

MESSRS. CLARE AND CO., STOCK AND SHARE DEALERS, 16, AUSTIN FRIARS, OLD BROAD STREET, LONDON, E.C.

SPECIAL BUSINESS in all SOUTH AFRICAN DIAMOND SHARES. FOR SALE,-150 KIMBERLEY NORTH BLOCK at £2. 30 SCHWAB'S GULLY at £6, cum div.

JOHN LENN AND CO.'S CIRCULAR, POST FREE, contains Highest, Lowest, Latest Prices of all Stocks and Shares, also shows the return per cent. at a glance.

JOHN LENN AND CO.'S CIRCULAR, POST FREE.
The advice given in their former Circulars has enabled investors to make from 50 to 150 per cent. in a week.

JOHN LENN AND CO.'S CIRCULAR, POST FREE, contains special information respecting the safest investments obtainable, paying from 5 to 12½ per cent.

JOHN LENN AND CO. (LIMITED), STOCK AND SHARE DEALERS, 4 AND 5, GROCERS HALL COURT LONDON, E.O.

THOS. ELS AND CO., STOCK AND SHARE DEALERS, 6, BOND COURT, WALBROOK, LONDON, E.C.

Business transacted in all Stock Exchange Securities, Foreign Stocks,
Railways, Mines, and Miscellaneous Shares.
Thos. Els and Co. have Special Business in the following Mine Shares;—

THOS, ELS and CO. have Special Business in the following Mine Shares;
Balkis, 4s, 9d.
La Plata, 5s, 9d.
La Plata, 5s, 9d.
La Plata, 5s, 9d.
Lisbon-Berlyn, 5s, 6d.
Old Shepherds, 13s, 3;
Organos, 10s.
Organos, 10s.
Organos, 10s.
Organos, 10s.
Schwab's Gully.
Orica, 21s.
Our Monthly Circular may be had (post free) on application.

PROFITABLE INVESTMENTS.

To no class of joint-stock business does the Trust principle seem more applicable than to mining; for the essence of this principle is that risks shall be divided, and so minimised as much as possible. It is, therefore, matter for surprise that so few attempts have been made to apply it to mines. One of the few instances in which the plan has been carried out is

THE HOME MINES TRUST (LIMITED).

THE HOME MINES TRUST (LIMITED).

This flourishing company continues to enjoy increased prosperity, and maintains its position as a sound 10 per cent. dividend-paying investment.

"Every improvement in trade and in the price of metals reacts on the securities of the trust, and we venture to predict that from the bountful harvest of all descriptions all over the world, an impetus will be given to trade which will carry metals and mining securities very much higher. This being conceded, there is not the slightest doubt that the trust will occupy an enviable position, and be able to place itself in the foremostrank of such institutions.

"During the very dull period through which the commercial world has been passing this trust has maintained an average dividend of 15 per cent, for the past three years, and this being so, it can readily be understood what it will be able to accomplish when business is prosperous.

"When it is thoroughly understood that this trust is not engaged in mining on its own account, but simply takes note and advantage of the fluctuations in the market for home mining shares, and advances cash to enable holders and others to do likewise, investors will soon realise the fact that from the profits obtainable on their numerous transactions, which are spread over a wide area, the Trust can readily earn 15 to 20 per cont, per annum, and this has been its average rate since its formation. Although only 10 per cent. is distributed, as amuch, or nearly so, is added to the reserve fund, and a continuance of the substantial return of 10 per cent., whatever the condition of business may be, is thereby assured.

"The shares are of £1 each, fully-paid, present price £1 5s. including the

stantial return of 10 per cent., wnatever the condition of business may be, is thereby assured.

"The shares are of £1 each, fully-paid, present price £1 Ss. including the quarterly dividend of 10 per cent., and probable bonus, payable this month.

"Dividends are payable quarterly. The shares are in active request."
Investors should apply for our early October Circular, issued with special reference to the advance in the Bank rate, and its effects upon the markets.

ABBOTT, PAGE, AND CO.,

42, POULTRY, LONDON, E.C.

eld a

were read a field, for th

Bram: Geologian the being the from

both o

ing ru

vario
Par
mark
topog
horiz
const
tour
these
gethe
tions
that
Whe

cide

THE FIRST SILVER SMELTING WORKS IN AUSTRALIA-A RIVAL TO SILVERTON-No. I.

A RIVAL TO SILVERTON—No. I.

The successful establishment of the first silver smelting works in Australia on the Sunny Corner Gold, Silver, and Lead Mine, in the vicinity of Mitchell's Creek, is a gigantic leap forward in the mining development of New South Wales. It inaugurates a new colonial industry, opening up a field for artisanship and manual labour, the rapid extension of which is already ensured by the rich silver discoveries made in many parts of this colony. Except where silver lodes of almost unpuballeled richness have been discovered, their existence heretofore has not caused much sensation or excited any very great attention. Our progress in silver mining has been limited by the want of smelting works, which until now no practical attempt has been made to supply. Unlike the more valuable and often accompanying metal, gold, the treatment of silver ore is surrounded with difficulties insuperable to the uninitiated. With free gold—and the greater part of our gold is free—the veriest novice will soon with difficulties insuperable to the uninitiated. With free gold—and the greater part of our gold is free—the veriest novice will soon find some means of saving it, but mixed with baser and refractory metals, silver has to undergo a most complicated process. Silver being infinitely inferior to gold in value, and its treatment intricate and expensive, the silver lodes in the Sunny Corner Mine up to some two or three years ago were entirely neglected. The richness of some parts of these lodes having been proved by assaying, quantities of ore were forwarded to England for treatment, realising from 71. 17s. 6d. to 231. of bullion per ton, but dividends, the chief aim of all mining investors, were almost impossible. The ore had to be carried over mountain ranges to a railway station, thence to Sydney and England. Money and time, which are said to be the same things, were spent without satisfactory returns.

THE ERECTION OF SMELTING WORKS

Was determined upon, Messrs. Lamont and Co., an American smelting organisation, made a proposal which was accepted. They guaranteed to expend 4700l. at their own risk to demonstrate their process. In return they are to receive 2500l. out of the first 5000l. of bullion products, and the other moiety after working for 90 consecutive days, at the rate of 50 or 60 tons per day, the ore to yield during that time not less than 95 per cent. of its bullion contents. After that the smelting company will receive a royalty of 4s. a ton for a period of three years, but the directors of the mine also decided to proceed with the erection of a smaller furnace on their own reo proceed with the erection of a smaller furnace on their own re-ponsibility, and it was this one in which smelting operations have een commenced. Some five months have been occupied in its erec-Difficulties were encountered and delays necessitated both so serious that the assistance of the staff of artisans from America, specially skilled in the work, who were previously engaged in the erection of the larger furnace, was cheerfully received for the completion of the furnace and the commencement of smelting operations. Consequently the erection of the furnace has been temporarily suspended. Day and night has been occupied in the erection of the present works, and although nearly every artisan connected therewith assured our representative that he never had a doubt of failure, but was certain of success, the attending circumstances show that the starting of the works was a movement surrounded with the individual and collecworks was a movement surrounded with the individual and collective anxiety of mind of all concerned, who, like the admirers of the world's present sculling champion, are wise after the event. As soon as the last nut was placed on the last screw, and the last lathe on the wheel, the furnace fire was lighted. It was ten minutes past two on Wednesday morning last. No christening ceremony was indulged in, and the presence of the directors did not grace or distinguish the scene, for they were not invited. "How nice we would have looked if anything had gone wrong!" was the explanation given by the enthusiastic artisan whose mind, according to a previous statement, had never been disturbed by even momentary fear of failure. Albeit success greater than anticipated by the most sanguine silver-smelter has crowned their labours. Within an hour of starting the furnace the slag came away from the place intended, and in the quantity expected, and then the bullion ran out in due time and place. Everybody was jubilant because everything was working splendidly. Early that morning telegrams were sent to the Sydney directors and shareholders, whose spirits rose proportionately with the shares. Now, the men at the mine, from the general manager downwards, are fully prepared for a christening ceremony, or any other form of congratuthe men at the mine, from the general manager downwards, are fully prepared for a christening ceremony, or any other form of congratulations. No hitch and no stoppage for a moment have taken place. In silver smelting there appears to be no such word as "stop" if you can help it. Sunday and Monday are alike. The furnace must be kept going, and a determination to do this is expressed in the countenance of every smelter at Sunny Corner. The limited number of men skilled in the work necessitates them working twalve hours. of men skilled in the work necessitates them working twelve hours a day, in which they have cheerfully acquiesed, for to them it is palpably a labour of love. How long it will continue so at the rate of 12 hours a day, Sunday included, is beside the question.

THE PROCESS OF SMELTING.

To give a technical description of the process of silver ore smelting from the time the ore leaves the mine till the silver extracted therefrom is ready for coinage or other purposes with its thousand and one complicated details and its chemical requirements is exceedingly difficult, and as inadvisable as difficult. It would confuse ceedingly difficult, and as inadvisable as difficult. It would confuse rather than instruct the general reader. We shall, therefore, attempt a description of the furnace now at work; that will be at least interesting. The furnace has a capacity of burning 30 tons of silver ore a day. It is almost entirely of iron, of oblong shape, standing upright to a height of about 35 ft. It is fed in the centre, the fumes escape at the top and the slag and bullion are taken from the bottom. It stands on an iron and strongly-built brick foundation, and has two distinct compartments, the inner for the fire, the outer for wind and water, the first to keep up the fire, the second to present the and water, the first to keep up the fire, the second to prevent the iron melting with the ore. Wind and water are furnished by a 12-horse power engine. Thousands of gallons of water are hourly distributed around the furnace, and at tremendous power maintained by a luge wind blast. A continuous stream of water is supplied by the mine, and when heated by the furnace fire the water, instead of running to waste, is retained and used again when sufficiently cooled The ore is received from the mine on to a platform at the mouth of the furnace. Here are feeders skilled in the fluxing of minerals and metals. Each has an iron wheelbarrow into which he places the required proportion of the ingredients under his charge, the four used being silver ore, limestone, coke, and slag. The four quantities of stoff adjusted to almost a nicety are thrown into the mouth of the furnace at intervals of every two or three minutes. On the ground floor, some 20 ft, below the feeder, are men energed in allowing the stor adjusted to almost a nicety are thrown into the mouth of the furnace at intervals of every two or three minutes. On the ground floor, some 20 ft. below the feeder, are men engaged in allowing the slag to escape at similar intervals. At the lower extremity of the furnace is an immense crucible always nearly filled with lead in a molten state, because of the great heat of the fire. Into the basin about 3 tons of lead, containing nosilver whatever, was placed before the fire was lighted, as a conveyance for the silver, and now the necessary supply is kept up by the large quantity of lead contained in the ore, averaging about 20 per cent. The ore, limestone, coke, and slag, are fluxed by the great heat of the furnace. The lead, silver, and whatever other metal is contained in the ore flux together, and being whatever other metal is contained in the ore flux together, and being the heaviest run to the bottom into the crucible already containing molten lead, the mineral properties of the ore, with the limestone and unconsumed properties of the coke remaining above in the form of slag. The latter is drawn away from the front of the furnace, and the bullion from the right hand side. In the case of the slag, there is a small opening plugged with stiffened clay. This is at the stated intervals burst through with an iron bar, and the slag in a molten state rushes out at the right time, lighting the whole of the works by its great illuminating power. It runs into an iron basin, holding about 3 cwts., and forms itself into a cake. While in a state of fusion it has been proved that the properties are equally distributed. An iron rod is inserted, small particles of the slag cling about it, the rod is dipped into a bucket of cold water, by which the particles of slag are removed, and in which they are kept for assay, to ascertain if all the bullion is being extracted from the ore. In cooling, the slag forms itself into a black mass something like coal, but much heavier. If the assay proves it still to contain any appreciable quantity of bullion it is purposely replaced in the furnaces. If no appreciable trace of remaining bullion be found, it is thrown away, portions of the heap being broken up into small pieces to assist in the fluxing of other minerals. As soon as the whole of the molten whatever other metal is contained in the ore flux together, and being

slag has run out, or the basin to receive it is full, a man closes the small hole up with another round piece of mixed clay. The original hole is made in the front of the furnace, and is much larger than that which is used for ordinary purposes, being bricked around. This is done to allow any blocking of slag or other slight accident to be remedied by tearing away the bricks and clearing the obstruction by means of the larger entrance. At longer intervals the bullion is extracted from the side of the furnace. A gauge in the form of a little well or basin indicates when the time has arrived for its discharge. The bullion in this gauge throbs gently up and down just as if it were breathing. When fully charged the bullion rushes away from the furnace like a small stream of water into a basin prepared to receive it. Beneath this basin a fire is kept up to keep the mixed metal in a molten state, and so send any slight proportion of slag to the surface. When filled, the slag is skimmed off, and the bullion ladded into moulds preparatory for assay or refluxing. Should the assay show that in silver these blocks of bullion are not up to the standard required for the refining process, they are again thrown into the furnace to increase their richness in silver, as the means of refining the bullion—that is, dividing it into its exact proportions of silver, gold, and lead by cupelation—has not yet been provided.

THE MINERAL WEALTH OF NOVA SCOTIA.

The mineral wealth of the province of Nova Scotia has constantly been brought to the notice of the readers of the *Mining Journal*, and as a large number of members of the British Association has now taken the opportunity of personally inspecting some of the mines and mining districts, it may be hoped that more than hitherto will be done to develope the many promising undertakings with British capital. Our old friend, the Ray. Dr. Honeyman, well-known to a be done to develope the many promising undertakings with British capital. Our old friend, the Rav. Dr. Honeyman, well-known to a large number of the members from his having so often filled the office of Canadian Commissioner to International Exhibitions in Europe, was, as usual, energetic, agreeable, and ready with necessary explanations, and there were plenty of other willing Nova Scotians present to assist him. On Sept. 24 quite a large party left Halifax for Montague, which was reached after a pleasant hour's drive, the scenery along the road being duly pointed out and admired. The first point of landing was at the works of the Bluenose Mining Company, right alongside the road. It was remarked by several that it was an unusual easy route, the mines of Germany and some other countries being situated in almost inaccessible fastnesses, to which such a thing as a road passable for a barouche was unknown. So handy to an important centre of civilisation, with good roads for supplies, and with all the material required (solely excepting fusemanufactured within a radius of a dozen miles, it was at once notice) able that mining here must be under most advantageous circumstances. The company were shown over the works by Mr. Charles Annand, one of the directors, and Mr. Baker, the manager, who were most explicit in their explanations. This is the same site as the old De Wolf Mine, which was reopened by the Bluenose Company about a year ago. After nine months of unsuccessful work, they cleared out the old shaft 80 ft. deep, and sunk it 35 ft. further, but it is only within the last three months that payable leads have been struck. Of those there are three running parallel and nearly together—one about 3 in., another 6 in., and a third over 18 in. wide. Another shaft has since been sunk, now about 30 ft. deep, and in a third the lead has been struck a short distance from the second. The crusher is 1000 ft. or so away from the most distant shaft, in a line with the three pits, and from the engine there, supported along a from the most distant shaft, in a line with the three pits, and from the engine there, supported along a row of posts, is a rod which works pumps in each shaft. The crusher is an eight stamp affair of the pumps in each shaft. The crusher is an eight stamp affair of the orthodox Nova Scotia mine style, with the regular series of attachments in quicksilver plates, &c. The stamps weigh 700 or 800 lbs., and when they are working of course make a deafening noise. When the party entered, Mr. Baker had just emptied from the retort the result of "cleaning up" for a month's work, and there it lay a massive junk of gold, dull in colour, as it was yet partially mixed with the amalgam off the plates, not having gone through the secondary stages of purifying before being run into a bar. The last previous crushing represented 1 oz. and 15 dwts. of gold to 1 ton of quartz, but the present would be somewhat richer, the mine seeming to steadily increase in wealth as it is developed. This lump weighed 55 ozz., and represented the work of 10 men for 25 days. Some of the party—Messrs. Bauerman and Merritt—went down the 30-ft. shaft by tub and ladder, and saw the naked leads at the bottom where they were being stripped, free gold showing right along in pumps in each shaft. shaft by tub and ladder, and saw the naked leads at the bottom where they were being stripped, free gold showing right along in the quartz from minute specks to valuable little nuggets. A lot of the quartz was sent up to the surface, taken over to the crusher, and broken into splendid specimens, which were presented to each of the visitors by Mr. Annand. Some of these specimens contained valuable little nuggets, and will be treasured as souvenirs of the Bluenoses and the Bluenose Mine at Montague, and no doubt exhibited with pride and pleasure to friends thousands of miles away.

Next the party drove along the road a few hundred yards to the works of the concentrating company, which were duly inspected. These works have been running for about three years, but were burned down a year ago and rebuilt. They are for concentrating the gold in the refuse of the various crushers which has escaped the mercury plates in the stamp mills. This refuse has been regarded as useless, and the company by saving the gold make practically what they can

and the company by saving the gold make practically what they can of it. The process of concentrating is rather extensive. The stuff is first shovelled into little buckets on a revolving endless band, and is first shovelled into little buckets on a revolving endless band, and so carried up to a series of revolving screens, from one to another of which it is rattled through, and the coarse gravel all filtered out. The fine stuff is all carried down on to extensive washing arrangements with water, by means of which more dirt is filtered away, and the particles of gold being the heavier are left with a comparatively small proportion of sand, so much so that the stuff, when the water is squeezed out of it, has an appearance clearly betokening sandy gold all through it. The last washing process is over endless rubber belts constantly revolving in water. The whole machinery is run by a steam-engine of 18-horse power, and the mill is kept constantly going night and day. About 90 tons or stuff is washed per day, of which about 1½ ton of concentrates is saved. It somewhat resembles by a steam-engine of 1-shorse power, and the min is expressiblely going night and day. About 90 tons or stuff is washed per day, of which about 1½ ton of concentrates is saved. It somewhat resembles pyrites. This is sent home to Swansea, Wales, where it is purchased as it stands by a company which extract the gold from it by another process. The profit is not enormous, but there is not the same risk as in direct mining, all the refuse worked being certain to contain some gold, as that the industry is more of a regranging and what some gold, so that the industry is more of a permanent one, and what profit there is can be more steadily counted upon, as the refuse having all been through stemp mills of the same efficiency is pretty safe to all contain the same proportion of gold. The mill was stated to have a capacity for handling 200 tons of refuse. It is the property of the Consolilated Concentrating Company of Nova Scotia, an amal-gamation of a company formerly commenced at Waverley with one started on the present site. The head office is in New York, where started on the present site. The head office is in New York, wh most of the stock is held, although considerable is also held here. Unfortunately, the time being so limited, the visitors were o

able to see these establishments, and had to forego an inspection of other in many respects equally interesting mines, such as the famous Rose Lead—the Lawson Mine, out of which \$300,000 worth of gold was taken; the Kaye-Symonds Mine, which proved nearly as wealthy; Hayward's Mine at Renfrew, &c. An invitation, which wealthy; Hayward's Mine at Renfrew, &c. An invitation, wh for the same reason they were forced to decline, had also been tended to them from New York, and Messrs. Hunt and Rando sent here as a committee for the purpose of escorting them to the Oxford Mine at Musquodoboit (which has turned out \$97,000 worth of gold in 18 months), and the Kent, Essex (just recommenced), and Branswick Mines, at Tangler—the latter being the place were gold was first discovered in the province. Neither were they permitted to accept the hospitalities of the managers of the famous Salmon River Mine, the output of which has been from \$100,000 to \$150,000 River Mine, the output of which has been from \$100,000 to \$150,000 per annum, and in two and a half years up to the present time has raised \$250,000; nor the Gallihar Mine, at Isaac's Harbour, which has put out \$175,000 worth of gold; nor the famous 40-feet belt at Mount Uniacke—all of which visits were declined with regret. Point Pleasant was visited, and the effects of the glacial action noted, many interesting speculations being canvassed as to the age of the formation on which the city and the adjoining districts stand, it being only a matter of speculation as no fossils have been found

to fully determine the matter. About six o'clock the company neturned to the hotel, and subsequently proceeded to Government House, where they were entertained by his honour, with a number of prominent citizens. At the hotel again before midnight all expressed themselves as delighted with their brief stay here, and only regretful that it could not be lengthened.

The visit to the coal mining district was much appreciated. It was well known long ago that there was coal at Spring Hill; 20 was well known long ago that there was coal at Spring Hill; 21 years ago Dr. Dawson wrote as follows:—"About 20 miles southens of the Joggins shore, at a place called Spring Hill; coal measure appear with a dip to the north, indicating with their position not very far from the base of the Cobequid Hills, that they belong to the southern side of the Cumberland trough. I have had no opportunity of examining the coal seams of this place, but one of them is variouly stated at 8 and 12 ft. in thickness, and the coal is of good quality. The Spring Hill bed is at too great a distance from navigable water to permit it to be mined at present for exportation. It forms part of the reserve stores of coal waiting for their full development may railway extend across the country, or till domestic manufacture demand supplies of mineral fuel within the province. The present inland demand might permit it to be mined on a small scale, and could a railway be constructed it might be profitably employed in smelting inland demand might permit it to be mined on a small scale, and could a railway be constructed it might be profitably employed in smelling the rich iron ores of the Londonderry mines. Should railway communication be established between Cumberland and Halifax on comend, and New Brunswick on the other, this coal area would at one become important."

This is not had for a prophery. Communication has been as

end, and New Brunswick on the other, this coal area would at one become important."

This is not had for a prophecy. Communication has been established, not with New Brunswick only—there would be little in that—but with the larger provinces to the west, and the areas have "become important." It is pretty generally known now that Spring Hill sends out more coal than the property of any other company in Nova Scotia. The exports of Spring Hill coal alone are work more than all the exports of the county of all kinds of produce to years ago. Three seams are now worked by as many slopes. The old company worked away at all three for some time, while, in their excessive modesty, they thought they were only working two. The main seam, which is 11 ft. thick, was found so good that the company concluded to go at it in another place, and work the two area till they came together. On running their tunnel to make connection they found they did not come together, but the two participalities went by each other without any token of recognition. Then it was learned that two valuable seams, instead of one, were yielding up their contents. They are 80 ft. apart and each 11 ft. thick. The third seam, higher up than either of the others, is 13 ft. in thickness. Between it and the next one worked is a 5-ft. seam, which has not been attacked; and there are three below the lowest than the contents. The Spring Hill coal layers all dip to the north. Those the the Lorgins did the other way. The Coheguid Mountain seat the Lorgins did the other way. strata. The Spring Hill coal layers all dip to the north. Those at the Joggins dip the other way. The Cobequid Mountains are at the back of the Spring Hill coal fields.

at the back of the Spring Hill coal fields.

The mine having been visited, a descent was made upon Parsboro', Mr. Leckie sending his guests down in his own conveyance—the Spring Hill and Parrsboro' train. Dr. Honeyman rode in front of the car in order to get a number of lingering looks at the formation of the Cobequids, and further to convince himself that Selwyn and Dawson are not exactly right in their conclusions as to the age of the place. Mr. Gliphi and Dr. Blanford took in the situation from the rear platform, improving occasions when the train stopped at stations, or was detained by slow cows on the tract in front, by jumping off and breaking the stones up with their little hatchets. little hatchets

little hatchets.

On the morning of Tuesday, before it was yet day, Dr. Honeyman on the rampage. He had gone over the beach, and was ready for a trip round the island by breakfast time. Around the island or over it all the party went, and then took passage for Windsorper Hiawatha. Whatever conversation took place concerning the history of one place passed on the route shall not be rovealed lest Mr. Kilby Reynolds repeat his proud boast that he is the only fellow who ever wrote about Grand Pre, without quoting Longfellow, or referring to the heroine of one of his poems. At Windson, Mr. Black, the warden of the town, Mr. Spence and Dr. Haley, legislative representatives for the country, Shubael Dirock, and other, were waiting on the wharf with carriages to drive to the plaster quaries at Wentworth. The plaster trade of Windsor is old: 50 years ago the quantity put out was given at 42,000 tons. During the net

were waiting on the whart with carriages to drive to the plaster quaries at Wentworth. The plaster trade of Windsor is old: 50 years ago the quantity put out was given at 42,000 tons. During the next 25 years there were many fluctuations, but, on the whole, the trade increased, and at 1859 the sales were 95,000 tons. It got above 100,000 in 1860, but soon fell off again. At confederation about 50,000 tons was produced, but in 1870 it rose again to 98,000, and three years later to 120,000. Year before last we exported 133,000 tons, and last year 145,000. The price on the wharf varies year by year, but keeps in the vicinity of \$1 per ton.

At Windsor the party enjoyed the pleasure of a drive about town to see the residence of Sam Slick, and other things of interest took place. A good look was taken at several of the fine farms for which Windsor is celebrated. Then the city politely invited the guests to dinner at Doran's. The table was spread with the best. The Warden presided with dignity, and after dinner Warden Black, on behalf of the British Association who had already come to Windsor and for those to arrive later. He took this visit as a partial payment of the debt due to Windsor from England for the gift of King's College of Williams, Inglis, Sam Slick, and others, whom she had borrowed to fight her battles, assist in her legislation, and wield for her the bishop's crook. Dr. Blanford replied briefly, acknowledging for himself and his present and absent friends the compliment paid, expressing his astisfaction with what he had seen, but holding that the bisnops cross. Dr. Dianotti replaced by the present and absent friends the compliment paid, expressing his satisfaction with what he had seen, but holding that the debt of England to this province had rather been increased than lessened by the present occasion. The Provincial Secretary followed in a brief and fluent speech, in which he stated that he had enjoyed his trip immensely, and that he thought there was no better immensely. ration agency than to make intelligent foreigners acquainted with he resources of the country.

LAKE SUPERIOR, NORTH SHORE—IMPORTANT DISCOVERIES.—The mines in this district are generally in a state of active development, but far above all others is the famous Huronien which has already established its reputation as a gold and silver producer. A ton of concentrates is turned out daily from the 10-stamp mill on the company's property besides the metal which is saved in the amalgamated copper plates. The ore is partly free milling, and what is not caught in the plates is concentrated over a Free vancer. Works are to be erected at once for the treatment of the concentrates by the chlorination process. The main shaft is down 100 ft., and 100 ft. of drifts have been run on the vein, which is 6 ft. to 8 ft. in width, and has been prospected for 2000 ft. in extent. The vein carries gold and silver in large quantities, and occurs in a formation of semi-crystalline greenish slate. Free gold may be seen with the of semi-crystalline greenish slate. Free gold may be seen naked eye in specimens of quarts. The company does not look for profit from the very high grade ore so much as from the entire village. stone, every pound of which yields gold and sliver in paying quanti-ties. The voin carries sylvanite, a compound of gold, silver, and tellurium, a mineral never before met with in any mine in the tellurium, a mineral never before met with in any mine in the Dominion. As soon as the heavy expenditure necessary to equip the mine ceases the Huronian Company will unquestionably pay large dividends. Several shipments of bullion have already been made, and one of concentrates. The Rabbit Mountain Silver Mine has produced some very rich ore, some of which taken from the vein within 10 ft. of the surface has yielded as high as \$452-50 per too. The company's operations will for the future be managed by Capt. John Tretheway, late superintendent at Silver Islet, who will, no doubt, do justice to the property. About 14 miles inland, north-ess from Neepigon Bay, a zinc blende mine has been discovered, which promises to become an important feature in the mineral development of the Lake Superior district. On the north shore of Bick Bay the Artic Mining Company is opening up a voin of argentiferes galena with gratifying results, it is said. On the main shore, about three miles inland, the Gold Lake Mine has been partially opened. It produces copper pyrites ore, carrying from 4 to 13 per cent in copper and \$35 in gold and silver to the ton. During the past

opany nevernment a number the all ex-

ated. It Hill; 20

s. The in their

8 13 ft.

ns are Parra-

or per istory at Mr.

z by own took hich

smmer several new discoveries have been made in the Lake Superior ngion. Oliver Daunais, the discoverer of the Rabbit Mountain Mine, came upon another silver deposit, which is said to be of equal importance, and it is reported that Mr. Emmons has discovered a rich deposit of native silver among the same black silver slates in which the Rabbit Mountain vein occurs. Seeing that the mining industry is now of such importance it is surely time that the Government should adopt active measures towards building colonisation roads to facilitate access to the several townships.

PRACTICAL FIELD GEOLOGY.

The annual meeting of the Liverpool Geological Association was held at the Free Library, Liverpool, on Monday evening. The

The annual meeting of the Liverpool Geological Association was held at the Free Library, Liverpool, on Monday evening. The report of the Council showed that the past year had been a successful one, there having been an increase in the number of members, and the fands being in a satisfactory state. During the session there were 10 evening meetings, at which a like number of papers were read and discussed, while practical meetings had been held in the field, the laboratory, and the museum. The election of the officers for the ensuing session having been made, the President, Mr. H. Bramall, M.Inst.C.E., delivered an address on "Practical Field Geology" his remarks being chiefly addressed to, and intended for the benefit of the younger, and less experienced, members. Assuming the possession of some such knowledge of geology as can be got from reading, a good manual, such as Juke's, or Lyell's, or Geikie's Textbook, and also of some practical acquaintance with the rocks of most usual occurrence, the observer will probably desire to examine and put on record the geological structure of some particular district both on and below the surface.

The first essential is a correct topographical map, without which no accurate or valuable work can be accomplished, and if the map has contour lines these will be found of great service. The instruments absolutely required are not many, and need not be costly. A pocket compass, which can be had for 5s. or 6s., a clinometer (which his speaker showed how to construct for a few pence), a hammer, pocket lens, scale, protractor, and notebook. The first proceeding is to trace the outcrops of certain well-marked and characteristic beds, and lay these down upon the map, in doing which the following rules may be usefully remembered:—1. If the beds are level the enterops will correspond with the contour lines, and the highest beds will be the newest.—2. If the beds if no manual proceeding a valley the newest to the valley, but (b) if the valley is less steep than the dip of the beds the ne

that the section line be run with the theodolite or spirit level.

Wherever possible it is best to select the line of section so as to coin-Wherever possible it is best to select the line of section so as to coincide with a line of dip, but when the lines do not so coincide a correction of the dip has to be made, the method of doing which, and also of filling in upon the section the geological information contained in the map and note-book, were shown on the black board. A number of useful signs and abbreviations were shown and explained, and the speaker concluded by urging the importance of care and accuracy in making observations, and the necessity of clearly distinguishing facts so obtained from "information received." The adverse was listened to with great attention, and at the close a vector dress was listened to with great attention, and at the close a vote of thanks was awarded to the speaker. The meeting was then resolved into a conversazione, a considerable number of interesting exhibits, specimens, microscopes, &c., having been brought together by the

Large Machine Tools for French Government Shipyards.—The French Government have recently been giving out pretty large orders to the tool makers in England for special machine tools, eridently designed for the construction of light-armoured swift cruisers, and in view of the recent criticism with regard to the British navy it is a point to which some attention might very properly be called. Messrs. De Bergne and Co., of Manchester, who about 12 months ago constructed for the French Government an exceptionally powerful shearing machine for cutting up steel plates I in. in thickness, such as now being used for the swift cruiser vessels, are now completing a second order for a similar machine, which is being delivered to the French Government Dockyards at Cherbourg. In this machine the cutter slide is carried upon two massive standards, and they have cutters 10 ft. 6 in. in length, and the main frame or standard is designed to enable a cut to be taken a distance of 3 ft. from the edge of the plate, and to cross-cut places any length 7 ft. 6 in. wide. The top har is also provided with a very substantial and effective stop-motion, by which the action of the top slide can be arrested without stopping the driving gear. The top slide is worked by a massive steel eccentric shaft driven by spargearing of 4 in. pitch. The driving power is self-contained, and the engine has an 18-in. diameter of piston, with 20-in. stroke, and it is fitted with a special governor and equilibrium throttle valve. The engine and the shearing machine are bolted together, and a special feature in a design is that the bottom shear is contained in the main standard without being a separate casting, which, whilst making the bottom shear more rigid, also simplifies the foundation for a machine of this size, which is usually a complicated piece of work. The total weight of the machine and engline combined is about 35 tons. LARGE MACHINE TOOLS FOR FRENCH GOVERNMENT SHIPYARDS.

VIRGINIA TIN MINES.—The account of the Bige Ringer In Mines.—Virginia, given by Dr. William B. Robertson, of Lynchburg, which will be found in another column, is regarded by the Richmond Industrial South as the fullest and most satisfactory yet published. It remarks that Dr. Robertson has devoted a number of years to studies and investigations that give value to any opinion he may express on mineralogical questions, and after having spent several weeks in the VIRGINIA TIN MINES,-The account of the Blue Ridge Tin Mine, and investigations that give value to any opinion he may express on mineralogical questions, and after having spent several weeks in the examination of the locality where these deposits are found he says:—
"I am fully convinced that the area I have particularised is an exceedingly valuable body of tin ore land. The metal is there beyond a doubt, and a little home enterprise, with some home capital, is all that is wanted to establish an industry which will be worth millions to those who embark in it and millions more to the State at large." The matter is one of great interest and importance, and we commend it to the consideration of Virginians of means and enterprise. There are certainly great possibilities involved, and if these are to eventuate in great results, it will be better that our own people shall be the beneficiaries. But we do not wish to be understood as intimating that the ories is not one to any others who may be willing ing that the prize is not open to any others who may be willing

HOLLOWAY'S PILLS—NERVOUS IRRITABILITY.—No part of the human machine requires more constant supervision than the nervous system, for upon it our health—and even life—depends. These pills strengthen the nerves, and are the safest general purifiers of the blood. Nausea, headache, giddiness, nand mental apathy yield to them. They dispatch in a summary manner those distressing dyspeptic symptoms, stomachin pains, fullness at the gid the stomach, abdominal distension, and regulate alike capricious appetites and confined bowels—the commonly accompanying signs of defective or mainished nerve tone. Holloway's pills are particularly recommended to persons of studious and sedentary habits, who gradually fall into a nervous and initiable state unless some such restorative be occasionally taken.

Registration of New Companies.

The following joint-stock companies have been duly registered:-London and Tilbury Lighterage Company (Limited).—
Capital 100,000l., in shares of 100l. The usual business of lightermen, bargeowners, stevedores, &c. The subscribers (who take one share each) are—J. J. Taylor, 9, Fenchurch Avenue; H. Pope, 5, Coal Exchange; F. D. Lambert, jun. 85, Gracechurch-street; R. J. Lambert, 85, Gracechurch-street; R. J. Lambert; C. Dinham, 18, Coal Exchange; H. Allport, Lancaster House.

Meetings of Public Companies.

ECTON COMPANY.

The ordinary general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Wednesday, Mr. JAMES JUDD, C.C., in the chair.

Registration of Speed Companies.

The following pintenede companies have been shy registered-companies and the companies of t

Oct.

he half-

er. Mr. Bowman showed him everything, and had proved to him that they ild have no difficulty in pumping the water out of the mine. Upon a careful mination of the property he saw quite enough, to induce him to take an in examination of the property he saw quite enough to induce him to take an in-terest in the company, and to join the board. His colleagues and himself had worked heartily together, and with the determination that the mine should be worked economically. The system on which they were working would he be-lieve commend itself to the shareholders, and if they always followed in other companies the principle upon which this company was going shareholders would not have to regret the losses which were so frequent in mining and other ventures. To his mind it was a very important consideration that the vendor's faith in the property was such that he had accepted payment for it entirely in shares.

worded sconomically. The system on which thay werelyworking would be believe command itself to the shareholders, and if they shary soliowed in other companies the principle upon which this company was going shareholders we not the property was such that he company was going shareholders were the property was such that he land accepted payment for itsentiery in the state of the control of the control of the control falls in the property was such that he had accepted payment for itsentiery of falls in the property was such that he had accepted payment for itsentiery of the control falls in the property was such that he had accepted payment for its entirely in the control of the control falls in the property and he to the control of the control falls in the control falls of the control of the control falls which the property, and he trusted that many more would do so next year.

Mr. Hawroow was gratified to find that very few shares had changed lands with the control of the control of

enflicient for their purposes. The boiler had been constructed with a furnace for the consumption of wood, but it was found from actual experience that the wood obtainable was not like that of California, and that they were not able with the present furnace room to create enough power. Some of the satisfactory points were that they found the natives, when they understood the work, could and were willing to work at night, so that they might have night knd day shifts. They would see the importance of this, as the more quartz they could past through the mill the greater would be the return. Then, again, the gold is of such acharacter that little of it is lost, another important fact. The health of their men, too, was excellent; they had had no single death, and in that respect they could well important point for them to consider and discuss was the question of raising fresh capital to work the mine. Facts had to be faced. They had not a sufficient amount to continue working the mine in the manner it was now proposed to. The principal source of new expenses was the determination to sink the shaft and drive on a lower level. While he considered they had got possession of a valuable mine, which would yield gold in every part, it was thought that a better yield would result from quartz taken at a greater depth. They had found that the natives had been at work on their property before them, and exceeding the confidence of the considered they had got of the considered they had got of the considered to the property before them, and exceeding the confidence of the considered to the property and plant, on which this might be done—first, by the issue of preference shares, bearing (say) 10 per out. Interest, allotted by pay their way and not make a loss. He should the be form the few ways in which this might be done—first, by the issue of preference shares, bearing (say) 10 per out. Interest, allotted for head of the property and plant, on which they had spent so much; therefore, the board favoured the issue of preference sh ted with a furnac

ton from their present workings, and arrocated the sinning of the sinate select the water level, for which, of course, they would require capital to provide necessary pumping apparatus, &c.

Mr. Grant, who stated that he was one of the largest shareholders in the company, said his faith in the mine was not at all shaken. At the last meeting he had spoken in favour of Mr. Lane, their agent, but now he was sorry to say he was obliged to sit in judgment upon him. He hoped, however, it would not be taken by that gentleman as at all personal, but only as concerning his position as agent. He then quoted various extracts from letters and reports of Mr. Lane, in which his conclusions were not borne out by the results, and he thought that they should not depend on him for the future. He did not think that they should not depend on him for the future. He did not think that they should not excessful results would follow. Mr. Lane was a good general engineer, but he did not know enough of mining. He had done his best, no doubt, but he had made great errors of judgment. It was, he thought, essential that there should be a change of management, and then the mine might be put in the foremost position among mining companies.

A BHAREHOLDER stated that it was a lamentable fact that they, after spending 40,000£, were in their present state.

Mr. Harvar said he had been favoured with a kind and polite note to the Mr. Harvar said he had been favoured with a kind and polite note to the

A SHAREHOLDER stated that it was a lamentable fact that they, after spending 40,0002, were in their present state.

Mr. Harver said he had been favoured with a kied and polite note to the agent, giving him permission to view the mine, which he had done, and he was certainly of opinion that the work done by Mr. Lane had been well carried out, and the stone in the faces looked so well that on his return he bought more shares. With regard to raising fresh capital, he would say do nothing of the sort. There was 4000! left and 3000 tons of ore on the surface, the treatment of which would pay the product. In his opinion, the property was a valuable one. After some discussion it was stated by Mr. Grant that it was his intention to call together at his office some of the largest shareholders to draw up a programme of how the mine was to be conducted in the future, and that at the next meeting they would state what conclusion they had arrived at.

The report was then put to the meeting, but it was only understood to be received and not adopted, further discussion upon it being postponed till next meeting.

meeting.
Mr. Harver stated that he was going out to the Coast at once, and would be appy to serve the company in any way he could.
The meeting then terminated with the usual vote of thanks to the Chairman.

LINARES LEAD MINING COMPANY.

when he offer information in the fig. and this way every surging the control of the conclusion proposed the mice, and the scaled the proposed the mice, and the scaled the proposed the mice and the scaled the proposed the proposed the scaled the proposed the p

that point. It would be evident, from a glance at the section of the mine, the a very large reserve of ore was being opened up in this mine. Within the passix months the distance driven had not been every large, but it had been through the course of ore that there was an addition of probably 300 or 400 tonst ore in that one place. This was further satisfactory to us as miners, because of the course, far more important than any improvement at a shallow day, it was a very material improvement in the deepest point in the mine, which made between Warne's and Poill's shaft by a long cross-cut. The water made between Warne's and Poill's shaft by a long cross-cut. The water had been pumped not only from Poill's, but also from Warne's Mine by since been pumped not only from Poill's, but also from Warne's Mine by since been pumped not only from Poill's, but also from Warne's Mine by since been pumped not only from Poill's, but also from Warne's Mine by since been pumped not only from Poill's, but also from Warne's Mine by since been pumped not only from Poill's, but also from Warne's Mine by since by the considerable expansion one of the numerous avaings which was enabling this company to past the long period of depression in the price of lead they were now experience, the sinking of the shaft was, however, going on as rapidity as possible, and the sinking of the shaft was, however, going on as rapidity as possible, and the regard to the Quinientos Mine, the reserves of ore were well maintained, and considerable quantity had been opened up in the 100 and 115 fathor levels the neighbourhood of Taylor's shaft. Altogether the shareholder level away feeling hopeful as to the position of the mine; while with regard to the quotation at that time being better than it had been for some months particularly and the considerable of the mine; while with regard to the role of lead that was certainly looking more cheerful than it did regard to the price of lead that was certainly looking more cheerful than it did not man anothing any

FORTUNA COMPANY.

FORTUNA COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Queen-street-place, on Thursday,
Mr. ROBRET HENTY (the Chairman of the company) presiding.
Mr. HENRY SWAFFIELD (the secretary) read the notice convening the meeting. The reports and accounts were taken as read.
The CHAIRMAN said the reports were so full as to leave very lith to be said in moving their adoption. There was a good deal of monotony about the proceedings, their only fluctuations to notice being those in their dividends. There, however, although the pay ments were not as large as could be wished, they had never failed to pay a dividend, nor did he think that they would do so in the fature, at all events for some years to come. With about 80001, in hand there must be no meet the shareholders for some time to consend the think that they would do so in the fature, at all events for some years to come. With about 80001, in hand there must be no meet the shareholders for some time to consend the shareholders for some time past. The Chairman then moved to share were certainly very cheering. That morning they had had one of the best north shareholders for some time past. The Chairman then moved to shareholders, and the report and accounts.—Mr. Lowclusse seconded the motion.

The CHAIRMAN pointed out that t

ALAMILLOS COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Queen-street-place, on Thursday,
Mr. ROBERT HENTY in the chair.

Mr. Heney Swaffield (the secretary) read the notice convening ne meeting, and the report and accounts were taken as read. The Chairman referred with regret to the absence of Mr. John Mr. HENRY NWAFFIELD (the secretary) read the notice convening the meeting, and the report and accounts were taken as read.

The CHAIRMAN referred with regret to the absence of Mr. John Phillipps Judd (the Chairman of the company), owing to indisposition, and then said that unfortunately the dividend which the company was able to pay this year was not a particularly good one. Then had been several reasons for this fact, which were beyond the control of the directors. Unfortunately the mines had not yielded so much ore as on some former occasions, while the price, as the shareholders were is well aware, had been ruinously low. The reserves, however, had not been mirally trenched upon, perhaps not stall; but at the same time the returns had sto been equal in amount to what they had been on former occasions. They were just in this position, as he had remarked at a previous meeting, that but for the wey bad times in Spain they would be worse off than they actually were, for in cost-quence of the shutting up of several mines in the neighbourhood a gest samy men were thrown out of employment, and some of the unfortunate miners were willing to come and scratch about the property of the company in the beg of getting something to eke out a very poor living. In this way they assisted the company, for they got the ore raised by those men at a price which yielded the company a fair profit. They had still a very handsome cash balance in bad, so that under no circumstances were they likely to have to stop working, set they could only live in hopes that before any of the balance was exhausted they might be in a better condition. In any circumstances they would be able hold their own, and wait for better times. He moved the adoption of the report and accounts. —Mr. S. J. WILDER seconded the motion.

Mr. WILKINSON asked why it was that the rent of the superintendent's host did not appear in the accounts now presented?—The SECENTARY replied the the rent was paid annually, and would appear in the next accounts. In replying them a

result which was brought about was remarkably steady for a mining resist and he believed that steadiness was likely to be maintained in the future. But had now in the eastern part of the mine an improvement in the upper great at a comparatively shallow depth—40 or 50 fms. from surface. In Mr. Toshit reportly it was stated that "in the 50 fm. level, driving west of Ban Feiph shaft, the lode has been very changeable, and in July and August opened up shaft, the lode has been very changeable, and in July and August opened up a larger yield than they usually had in the Alamillos Mins. In San Victor shall they had looked with great interest for a considerable time past on the sile level, and this had recently opened up some rich ground, yielding an sage of 3 tons to the fathorn. Binking the shaft below that level had been carried on, and it would be easily understood that considerable three had not had been carried on, and it would be easily understood that considerable three had been carried to be which for a 50 fm. level by the end of next most, when a very short cross-cut will intersect the lode, which, if found as good shaft will reach the necessary depth for a 50 fm. level by the end of next most, when a very short cross-cut will intersect the lode, which, if found as good shaft will reach the necessary depth for a 50 fm. level by the end of next most, when a very short cross-cut will intersect the lode, which, if found as good as a good shoot of ore west of the shaft." If these anticipations were verified they would have a very valuable plece of ground. In the deepest level in the mist would be a very and the level and on that any considerable amount of of; the fathorn. The temporary falling off in the returns was not a matter to cause them any anxiety. Aismillos had this great advantage—that the level show any own store and the control of the fathorn. The temporary falling off in the returns was not a matter to cause them any anxiety. Aismillos had this great advantage—that the level show on we reversely of th

tota', 1 DEN

WEST MARY ANN.—At a meeting of adventurers, Liskeard, on Wednesday, it was resolved to suspend all operations, and offer the d at the

ery little deal of

SCOTTISH-AUSTRALIAN MINING COMPANY.

Reoport and accounts prepared for the forthcoming meeting are been issued to the shareholders. With regard to the Lambton while the point states that 127,609 tons of coal had been sold for billion, the report states that 127,609 tons of coal had been sold for billion, the report states that 127,609 tons of coal had been sold for billion, the properties of the coal trade of New South Wales having continued active, the coal trade of New South Wales having continued active, the size has been fully employed. The price has remained at 11s, a ton, and the size of coal for the current half-year up to Aug. 22 have amounted to 39,931 tons. The machinery, buildings, railway, and colliery plant is in good order, and be machinery, buildings, railway, and colliery plant is in good order, and be machinery, buildings, railway, and colliery plant is in good order, and size of men employed under the supervision of Capt. Holman have been sized drought which prevailed, the crecks whence the company obtained is prospecting and working several parts, but owing to the long consisted of the state of the size of the

FOREIGN MINES.

AMILIOS.—Oct. 8: The lote in the 20, driving west of San Martin's shaft placescale, its present value being 14 can per fathom. In the 20, driving west of San Green and the control of the

only stopping occasionally to do some small repairs.—Ore Shipments: Company's ore—19 sacks cobbed ore from dump, weighing 1635 lbs.; 31 sacks lead headings, weighing 2 tons 38 lbs.; 73 sacks sinc headings, weighing 3 tons 37 lbs.; bts.; 12 sacks, weighing 5 tons 1710 lbs. Leasers' ore, 117 sacks.

DENVER GOLD.—Frank S. Craven, Sept. 30: Work in the Kansas Mine has lead without interruption. The 135 west was the only main drift driven that month. It has now a total length of 525 ft., and is very poor: 26 miners were supported last week stoping on contract, making 25 contractors: 34 tribute miners are also at work in various parts of the mine. The result of the milling for the eight days ending Sept. 23 were as follows:—Company's ore, 195 tons, yielded 33½ css. gold; tribute ore, 77 tons, yielded 40½ ozs. gold: total, 272 'vas, yielded 104 ozs. of gold: 3-073 tons of tributers' smelting ore was sold for DEVALA MOVAR GOLD.

y form per fathom. In the 120, driving east of O'Shea's engine-shaft, the lode is of the state o

substantial addition to future returns.

MYSORE GOLD.—B. D. Plummer, Sept. 13: Mining Operations: The stopes both north and south of Taylor's shaft, 53 ft. below the 173, continue rich. The lode is at places 3 ft. up to 7 ft. wide. The assay value this week is 2 ozs, 4 dwts. 15 grs. per ton, and it would now appear that we have an immense amount of highly valuable rock to work upon in this place, but I wish you to understand that this is at the bottom of the shaft, and we are not yet able to bring much force to operate on it. The other places throughout the mine are without obange.

in ladders and enlarging the cave in places where it is small so as to enable them to holat direct from the bottom of the cave to the tunnel level, which is about 100 ft. in depth. Have shipped 14 thos ore this week, and have 13 tributers at work.

— Telegram, Oct. 14: 19 tons ore shipped and 35 tons smelted, producing to company \$239.

— Telegram, Oct. 14: 19 tons ore shipped and 35 tons smelted, producing to company \$239.

St. JOHN DEL REY.—Telegram from Rio (Oct. 9) advises the produce for Statember as S550 oits, cold, worth at 5s. 6d. per oit., 1598; 15s. sterling.

St. JOHN DEL REY.—Telegram from Morro Velho, dated Rio de Janeiro, Oct. 10: Produce for the month of September 18,590 oits, value 7183? Vield 3:5 oits, per ton.—Oulaba: 1500 tons stamped; yield 1:9 oits, per ton.

— Telegram from Morro Velho, datad Rio de Janeiro, Oct. 17: Profit for the month of September 8002.—Oulaba: Profit for the month of September, 501.—

Breakage of pumning machinery requiring 24 hours to repair.

UNITED MEXICAN.—Mr. Hay, Sept. 29: El Diamante: We have sunk on the 20th inst. in Pozo de San Antenno 2:10 metres; total, 15:55 metres. The lode is much wider than it has been of late, measuring now 1:50 metre in breadth, of which 25 contimetres are in ore. On the 25th inst. we sold in public sale 29 cargas of different classes for 8468. The two ends of San Antenno late, and the same properties of the sale and the same properties. The same properties of the same properties of the same properties. The same properties of the same properties of the same properties. The same properties of the same properties of the same properties. The same properties of the same properties of the same properties of the same properties. The same properties over the whole breadth of the end. In the frente No. 1 of San Juan weet we have driven on the 20th inst. we have driven on the 20th inst. who have driven in frente No. 2 of Santa Rosa west 1:00 metres. total, 19:50 metres. In this end some slight appearances of ore have begun to show themselves.—S memble. It has now a total length of 55 ft., and is very poor; 26 miners were employed last week stoping on contract, making 25 contractors; 24 tribute for the best of the shaft, and we are not yet able to pring much force to operate on it. The other places throughout the mine are incompanied as work in various parts of the mine. The result of the milling of the shaft, and the property of the shaft of the

gine-si wide ; per fa startec startec

OWEN VEAN AND TREGURTHA DOWNS MINES.

The following letter and report have been received at the offices of the company from Captain Joseph Prisk, manager of the Great Wheal Lovell, North Metal, New Great Wheal Vor, Tresaveau, and Pheenix United Tin Mines. Capt. Prisk estimates an output of 25 to 30 tons of black tin per month so soon as the calciner on the mines is at work. The calciner is expected to be finished this week, and we are informed that even at the present low price of tin the above return with pay cost and leave a handsome profit. The total expenditure on the mines to Sept. 30 was 26,3381. 8s. 9d., and the tin sold since stamping commenced amounted to 21971. 7s.

Helsten Oct. 14, 1884.

Helston, Oot. 14, 1884.

DEAR SIR,—Enclosed find my report on these mines, which I trust will give you and your shareholders satisfaction. I am well pleased with the mine, and am quite safe in saying it will shortly rank with the best tin mines in the county.—I am, dear Sir, your obedient servant,

JOSEPH PRISK.

H. R. Lewis Ess. Bartholomew House London.

H. R. Lewis, Esq., Bartholomew House, London.

REPORT.

REPORT.

Oct. 6, 1884.

Gentlemen,—I have made a careful inspection of these mines, and beg to hand you my report thereon.

The main engine-shaft is sunk to the 85 fm, level below the adit, and a crosscut is now being driven south, for the purpose of intersecting the lode at this level, which will be reached in about two weeks from this date.

The 30 fm, level is driven east of shaft 15 fms, on the course of the lode, which is 3 ft, wide, worth on average 6t, per fathom. The back of this level is standing whole, and is available for working. The 50 fm, level is driven west of shaft 20 fms, on the course of the lode, which is worth 9t, per fathom. The back of this drivage is also intact, and is ready for stoping as soon as any additional tinstuff is required for the stamps.

The 40 is driven out of shaft 15 fms, and up to a large cross-course. The men are at present engaged in cutting through it, and, judging from the levels above, a great improvement may be effected here shortly. One stopely is being worked in the back of this level, where the lode is 5 ft. wide, worth 9t. per fathom; price for working, 22s. 6d. per fathom. The 40 is driven uset of shaft 45 fms, and has opened a considerable quantity of profitable ground. The love in the present end is 5 ft. wide, worth 8t. per fathom. In this level three stopes are being worked by 14 men, the stopes being worth on an average 7t. per fm.; price for working, 20s. per fathom.

opened a considerable quantity of profitable ground. The lote in the preent end is 5ft, wide, worth \$\delta\$, per fathom. In this level three stopes are being worked by 14 men, the stopes being worth on an average 7\delta\$, per fathom.

The 30 is driven east of shaft about 35 fathoms; the lode for the whole distance is worth \$\delta\$, per fathom, and can all be worked at a fair profit. Two stopes are being worked; in the back of this level, which are worth \$\delta\$, per fathom price for working, 20s, per fathom. The 30 is driven west of shaft 90 fms., through a lode worth on an average 7\delta\$, per fathom. The back of this long drivage is nearly all unwrought, and must be considered as a large amount of profitable reserves. Three stopes are being worked in this level, by 12 men, at 20s, per fathom, and are worth 6\delta\$, per fathom.

The 20 is driven east of shaft 9 fms., which is also opening profitable ground. In this level two stopes are being worked, where the lode is worth \$\delta\$, per fm., working 20s, per fathom. The 20 is driven west of shaft 90 fathoms, and all through profitable ground, some of which is now being worked in six stopes, by 28 men, where the lodes are worth respectively \$\delta\$, per fathom; price for working 1\delta\$, per fathom.

NORTH LODE.—This lode is about 45 fms. north of the engine or south lode, and was wrought on very extensively by the former workers to the 50, at which level a cross-cut is driven north from engine-shaft and up to the said lode. A communication is also effected by this cross-cut with the flat-rod shaft, and by driving another cross-cut at the 6\delta\$, your bottom level, you would in a short time open up a section of ground which would enable you to largely increase the returns, and add considerably to the reserves of the mine.

For your guidance I beg to say it is my opinion that this lode was rich for tin when last worked, as all the ground driven through from the adit to the 50, which is the deepest point in this part of the mine, is taken away to the wa

ow the mine is drained, I consider the value of the property can shortly be doubled.

It is also my opinion that the former workers carried on their operations on the south lode for copper, as a great portion of the drivages here are made by the side of the lode, which is the reason for your having such a large quantity of profitable ground available for working the moment the mine was drained, and the money value of which I estimate to be at least 50,0024.—a fact unparalleled in the history of Cornish mining.

I find that the surface operations have been commenced a little over two years, and since then a very large amount of work has been accomplished in building engine-houses, erecting jumping-engines, winding-engine, stamping-engine, also steam capstan, all being of the most modern construction, made of the very best material, fixed with accuracy, and working with great ease, and it may be asfely considered the best mining machinery in the county. The mine has also been drained from the adit to the 50, shafts and levels cleared and secured, permanent pit work fixed, and the main shaft deepened 18 fms. Everything underground is now in full awing of working, and in a position to yield large quantities of mineral monthly.

On examining the pump work in the engine-shaft I find it to be strong, good, well-proportioned, fixed with great care, and working well, and it is sufficient to keep the mine drained to a very great depth.

At the stamps, the dressing-ficors, which are laid out with great ability, are near completion. This will enable you shortly to treat at least 25 tons of tim per month, and as soon as the frames for dressing the alimes are in working order, your appliances here will be sufficient to dress 30 tons per month with asse.

The new calciner will be ready to work in about two weeks from this date.

order. Your appliances here will be sufficient to dress 30 tons per month with ease.

The new calciner will be ready to work in about two weeks from this date, and you will shortly be in a position to dress your tin on the mine. This will effect a great saving in the carriage of whits a distance of three miles, which hitherto has not only been expensive, but inconvenient and wasteful.

The general expenditure of the mine, especially at surface, will soon be greatly reduced. The dressing-floors, calciner, and other surface work being near completion, you will be able to dispense with a large number of your staff of masons, carpenters, and other surface labourers, which will reduce the monthly payments considerably.

I have great pleasure in stating that the prospects of the mine in general far exceed my expectations, and I may add that no abandoned mine that has been reworked in the county ever presented such prospects, especially as the returns will shortly increase from 11 tons to 25 or 30 tons of tin per month.

I consider the undertaking to rework this property to be honest and legitimate, and the sharehold-re who have invested in it will not only find it to be permanent and profitable, but by judicious and careful management it will shortly rank with the best tin mines of the county.—I am, gentlemen, your obedient servant.

H. R. LEWIS AND CO.,

MINING OFFICES,

BARTHOLOMEW HOUSE, BARTHOLOMEW LANE, LONDON, E.C.;

157, ST. VINCENT STREET, GLASGOW,

Supply accurate and reliable information on all Mines, Home and Foreign.

Execute orders and advise the Furchase or Sale of Mining Securities.

Undertake the Management of Mines or Mining Companies.

INVESTORS WILL AVOID, LOSS BY CONSULTING US BEFORE BUYING OR SELLING MINING BECURITIES.

ESTABLISHED 1871.

From Mr. John B. REYNOLDS:—The markets have continued in a state of considerable depression, but, happily, there is just now marked relief experienced, because of certain indications of a very marked relief experienced, because of certain indications of a very hopeful character—such as the increasing value of money, &c. During the early part of the week there was little or nothing doing in the mining market, but towards the close a demand sprang up for some of the leading shares, and also for many low-priced shares of first-class reputation. It is said that the fall in tin has been far too rapid to hold out any hope to speculators that it will remain at its present low quotation. Probably the reaction will be as rapid as the decline. That the reaction will come, if it is not soon upon us, there is, of course, no doubt. Buyers of Doiccosth, East Pool, and West Ritky, and other dividend mines are prominent; whilst Polberro, Trevaunance, and West Polbrean fully maintain the highest prices they have recently reached. We wish we could add to this list of progressive mines, but, unfortanately, there is a want of spirit on the part of many persons just now who coght, with the information they possess, to take advantage of the country of

prices they have receively considered that the information they possess, to take advantage of depressed quotations.

It is admitted that Poliberro, Trevaunace, and West Polibreen are exceptional concerns, whilst the very prosperous state of Trevaunance and its promising future must tell materially on the two others. It should, however, not be forgotten that those will not be the only mines which will be greatly benefited in, we expect, the near future. New Kitty, as it appears to us, should be carefully watched by all those who desire a first-class speculation. The fear that Cornwall has seen its best days has been so often expressed, and so often proved to be utterly groundless, that it is unworthy of comment. We believe very decidedly, however, that the St. Agnes district is gradually, but surely, coming to this front, and if very important discoveries are not soon made in other neighbourhoods perhaps those who may that the St. Agnes district is destined to take the lead will prove to be right. Be this as it may, it is most certainly admitted that to this district the attention of investors is being turned more and more.

TIN-PLATES AND GALVANISED IRON.-Messys. BROOKER, DORE, THE-PLATES AND GALVANISED INON.—Messrs. BROOKER, DORE, and Co., Oet 11, write:—Fin-Piates remain firm. Good cokes are not procurable under 18s. per box, Liverpool; we may, however, expect to see them slightly L.C. At the meeting of the aspociation, held last Thursday, in Birmingham, the galvanised iron makers present all reported more business doing; they were mostly booked up to the end of the year. An effort is to be made to bring the new makers into the association, and a meeting will be called in January next, which it is hoped will be a fully representative one, with a view to united action. The makers are mostly asking higher prices, but owing to the excessive production some manufacturers are selling as Iow as ever, notwithstanding the fact that sheets and spelter have both advanced. When their present stocks are exhausted they must, however, advance their prices for galvanised iron unless in the meantime sheets and spelter have receded again.

Mining Correspondence.

BRITISH MINES.

BRITISH MINES.

BEDFORD UNITED,—H. Tresise. Oct. 1s: There is no particular change in any of the bargains on the north lode.—Bridge Lode: In the 7s east we have out into the south part of the lode, which is about 1f, 6 in. wide, of a promising character, composed of caped, mundic, and one. In the act of a promising character, composed of caped, mundic, and one. In the south part of the lode, is improved in size and value, worth 10? per fathom. Good progress is being made in diving the end, which is about 9 ft. a week. Three stopes in the back of the 52 west are worth on an average 6, per fathom. The tribute pitches in the 62 west continue to yield a fair quantity of ore. In the 62 cast this divings in the 63 west continue to yield a fair quantity of ore. In the 62 cast this divings when taken down. In the 42 cast in the 63 strong and masterly in appearance. The lode in the winze sinking below the 42 east is 3 ft. 6 in. wide, and worth 10/, per fathom. Two stopes in the back of the 42 or worth 5/c per fathom each. The tribute pitches in the 42 and above are just as they have been.

CAIN CAMBORE—Wm. C. Vivian, 06.4 is: There is mothing ewe of imcarding the continue of the continue of the continue of the continue of fluor-spar, with chiorite and soft quartz, and in combination with these minerals rich patches of yailow copper ors. I think it probable that you may hear from me again respecting this drivage in course of the present week.

I well consecut to drive south of the engue-shaft, by legit men and four bors, will be consecuted to drive south of the engue-shaft, by legit men and four bors, will be consecuted to drive south of the engue-shaft, by legit men and four bors, will be consecuted to drive south of the engue-shaft, by the many of the consecutive of the cross-course, and the lode as it is getting beyond the influence is larger and producing green carbonates in suc change at this point since last week, but it is being vigorously pushed on. The 84 to drive cast of engine-shaft, by two men, at 5c, per fat

In the 32, east of the western shaft, the lode is 4 ft. wide, composed of strong capel, quartz, and peach, with mundle, worth 2 tons per fathom, and good stones of copper ore.

DEVON GREAT UNITED.—Laac Richards, Oct. 15: In 'the 120 fm. level, east of Willeaford's shaft, the lode is 3 ft. wide, of a promising character, and yields a little copper and mundic ores of good quality. In the 120 fm. level, west of Williesford's shaft, the lode is 3 ft. wide, and continues to yield 2 tons of copper and mundic ores, and its general character is of a promising nature. In the 60 fm. level, west of Williesford's shaft, the lode is 3 ft. wide, and continues to yield 2 tons of copper and mundic ores, and its general character is of a promising nature. In the 60 fm. level, west of Watson's abalt, the lode is 3 ft. wide, composed of capel and quartz, with peach, mundic, and a little copper ore.

DRAKEWALLS UNITED.—Thomas Gregory, Oct. 15: Engine-Shaft: We have got well into the 182, and find all strong and secure, and in the course of a few days we shall complete the clearing of the shaft to bottom and arrange the pit-work also. We must then put down the skip-road from the 22 to the bottom (about 12 fm.). The timber is all prepared for it, therefore there will be no cledy.—North Lode: The part carried in sinking is fully 3% ft. wide, with more lode standing to the north. There is no change in its general character beyond a little more anundle. The stuff being stamped from here produces fairly well for tin, and the results of the past week's working gives satisfaction.

DUCHY PERU.—R. and J. Narcarrow, Oct. 14: Since our last report we have effected a communication in the 80 with the wince from the 70, and have fixed the footway in the same, which has given good ventilation. We have now yet got away from the influence of the great east and west lode, we are not in a position to report on its value. This end will be pushed on with all possible speed to catch the dip of the shoot of lead gone south, where we hope for good improv

same on Friday, Oct. 27. All surface works, and works, and in a satisfactory manner.

EAST BLUE HILLS.—8. Bennetts, W. K. Mitchell, Oct. 15: There is not much change to notice as yet in the lode in the engine-shaft now being sunk below the 10; it is 4 ft. to 5 ft. wide, and worth 10, per fathom. In the 10 west end it is 2 ft. wide, and worth 7, per fathoms; and in the east end at the same level it is 2 ft. wide, and worth 8, per fathom. The stope in the back of this level is worth 10, per fathom. In the adit cast end a cross-course has just been passed through, around which both the ground and lode are very soft, and the latter in a very unsettled state. There is no increase of water for stamping purposes as yet.

inter in a very unsettled state. There is no increase of water for stamping purposes as yet.

EAST WHEAL LOVELL.—Thomas Quentrall, Oct. 15: We have cut plat and barrow-road, and resumed the sinking of the shaft below the 13. The lode is getting larger, and countains rather more tin than it did. At the junction of this lode with the south lode we expect a good improvement. In the 13 west the lode continues to produce fair quality tinstuff, and the ground is favourable for driving. There is no alteration in any other part of the mine.

GAWTON.—George Rowe, Oct. 13: The lode in the 95 cast is further improved within the past week, now yielding 14 tons of arsenical mundic per fathom. There is no other change in the mine since last report.

GAWTON.—Moses Bawden, Oct. 16: Setting Report: The 117 to drive east, by four men, at 121, per fathom; the part of the lode carried 55 ft. wide, will yield 6 tons of arsenical mundic of rich quality per fathom; worth 14 tons of arsenical mundic of rich quality per fathom, at 121, per fathom; worth 14 tons of arsenical mundic of rich quality per fathom. This end as we drive east is improving, and is one of the richest for arsenical mundic we have seen in the mine. It must be borne in mind that this part of the lode is standing in whole ground from the 117 to the surface. No. 1 stope, in the back of the 117 east, by four men, at 41. 10s. per fathom. A stope in the back of the 25, by four men, at 41. 15s. per fathom. No. 2 stope, in the back of the 58, by four men, at 44. 15s. per fathom. No. 1 stope, in the back of the 50, by four men, at 44. 15s. per fathom. No. 2 stope, in the back of the 50, by four men, at 44. 15s. per fathom. No. 2 stope, in the back of the 50, by four men, at 44. 15s. per fathom. No. 2 stope, in the back of the 50, by four men, at 44. 15s. per fathom. No. 2 stope, in the back of the 50, by four men, at 44. 15s. per fathom. No. 2 stope, in the back of the 50, by four men, at 44. 15s. per fathom. No. 2 stope, in the back of the 50, by four men, at 44. 15s. per by four men, at 12t, per fathom; the part of the lode carried (5 ft, wide) will yield & tase of arsenical mandic per fathom. With alones of copper ore, and such as the property of the part of the part of the part of the part of the late of the property of the part of the part of the part of the late of the part of th

north engine-shaft, sinking below the 100, the lode previously underlying the having taken a north underlie, a portion of the lode only-about 1f. when having taken a north underlie, a portion of the lode only-about 1f. when having taken a north underlie, a portion of the lode only-about 1f. when having the control of the provided of a portion of the lode only-about 1f. when the love west the lode of the lode of

NEW CARADON.-N. Richards, Oct. 15: In driving east of cross-cut at the

ying at the mouth of the adit. There is a large quantity more to turn over ad pall up.

NEW CARADON.—N. Richards, Oct. 15: In driving east of cross-out at the 50 fm. level the ground its much easier for driving in, and altogether of a more congenial character for the production of mineral. The lode is over 2 ft. wide, peroducing some splendid stopes of yellow copper ore. Good progress is also being made in driving the western cross-out north.

NEW KITIY.—W. Vivian, Oct. 16: Thomas's shaft lode is worth 12!, per fm. We expect to get the shaft down to the 4) by the latter part of next week. We shall then commence to out plat, and drive both east and west on the course of the lode. In the 20, driving east, the lode is about 3 ft. wide, and of a very promising character.—Engine-Shaft: We have driven about 20 fms. west of cross-out on the north part of the lode.

NEW LANGFORD.—T. Gregory, Oct. 15: The lode in the 10, west of engine-shaft, is 25 to 3 ft. wide, composed of quarts, blende, and a little silver-lead orces. In the 30, west of engine-shaft, the lode is over 3½ ft. wide, the leading or ore parts being about 2 ft. in width, producing blende, strong arsenical mundic, and copper orce, which we are saving for the market. This end look like coming into copper; the more we open upon the lode the stronger are the indirections for it.

NEW TERRAS.—R. Eade, Oct. 15: We are making good progress in sinking the east shaft, and the surply of water from this source is now fully equal to our requirements. The stopes in the deep adit continue to yield tinstone of fair quality. The same remark applies to the great stopes in the eagine-shaft. All other points progressing satisfactorily.

NEW TRUMPET CONSOLS.—T. Questrall, Oct. 16: We are pushing on the driving of the 40 fm. level east and west as fast as possible, The lode in these ends is looking better than at the upper levels, and we are expecting a good in provement in the weatern end as we get under the good run of ground driven through in the 25. The lode in the wince

copper ore per fathom.

NORTH GREEN HURTH.—J. Polglase, Oct. 9: It is evident we are now on NORTH GREEN HURTH.—J. Polglase, Oct. 9: It is evident we are now on an intersection in the south end. The end being in plate nothing can be defined, but in the back of the level, which is in hazle, a vein is visible, and of a kindly nature The men will rise upon it at once to see what it is. No more traces of vein have been r et with in the deep adit during the week. Nothing saw in Investigal consection.

184.

ng north
effy coneffy co

owing.

of foreountain

(6% ft.

ond the

ay that

rds the

away.

h every

regoing

outside

ich you

n, is let

greater linking a little largely

enkin: in the stopes natuff,

below d this see if und is have rth of ode in topper wide, it, the saving ch, we a that ton of in the

rking

the

fm. We se of pro-ross-the

ine ewi

al fould wish. The horses are engaged bringing the new machinery from the sales. We have again started to crush, and I hope our water supply will not spin fall sold. We have again started to crush, and I hope our water supply will not spin fall sold. The sales are supply will not spin fall sold. The sales are supply will not spin fall sold. The sales are supply at the sales are supply and found it contained 5 cats. of the per ton of lodestoff. I find there is some of the lode left by the old men for I bink over 55 fathoms in length. This point should be pushed on with all possible speed, as it will tell its tale at the end of the month.

Oct. 15: Scholi's patent stamper works most beautifully. TRESAVEAN.—J. Prisk, W. Edwards, Oct. 13: At the engine-shaft the shaft-mea areat present engaged in fixing bearers at the 126 to carey the 15 in. plunger lobe fixed at this level; we have nearly all ahe eastings on the mine, which will be said on the mines is obeing pushed on with all possible dispatch. At Cunnack's said the lode in the tribute pitch in the bottom of the 12, east of shaft, is producing 4 ton of tin per fathom. This is going down in whole ground and may be considered a valuable and important point. The 90-in. engine and all other makinery is in excellent condition, and working well.

TREVAUNANCE UNITED.—Wm. Vivian, Oct. 16: We are making good progress with the work in the engine-shaft, and shall have completed by the end of nat week the taking out of the ground for the foundation of the engine-boss. No change to notice in the 55 on the copper lode, which is worth 207, per fathom.

WEARDALE.—James Blenkiron, Oct. 11: Grove Rake: The tribute pitches

gess with the work in the engine-shrift, and shall have completed by the end of art week the taking out of the ground for the foundation of the engine-shome. No change to notice in the 55 on the copper lode, which is worth 20%, per instance.

WEARDALE.—James Bienkiron, Oct. 11: Grove Rake: The tribute pitches on the whole are looking a shade better than last week, worth from 13 cwts. to 53 csts, per fathom.—Bult's Burn: In coal sill drift the veri is from 2½ to 3 ft. vils, worth 30 cwts. of ore per fathom. A branch or lead is off to the south; but we expect this to come back again shortly, when no doubt an improvement will take place.—Killhope: The tribute pitches are without much change.—Greenlaws: In Jackson's drift 8th level, we have encountered a strong vein from 2to 3 ft. wide, chiefly tough douk, without ore to value; we have set the same on tribute. The drift in middle level is looking more kindly; vein 3 ft. wide, composed of spar and rider, worth 5 cwts of ore per fathom. The drift is wist is also looking more promising; vein 1½ ft, wide, ore per fathom. Den't drift has improved considerably; vein 2½ ft, wide, composed of spar and rider, and worth 10 cwts. of ore per fathom. The new trial in Jangler vein, old Iron Mine, wageable ore has been met with.

WEST CARADON.—N. Richards, Oct. 15: Gilpin's lode, in the 33 west, is now over 2t, wide, and will yield from 1½ to 2 tons of copper ore per fathom. A stope in the bottom of this level will yield 1½ ton of ore per fathom.

WEST CARADON.—N. Richards, Oct. 15: Gilpin's lode, in the 33 west, is now over 2t, winder, and worth 10 cwts. and will, chublless, considerably enhance she value of the mine. The stopos in the back of the addit the lode will yield drog ther about 2 tons of copper ore per fathom. A stope in the bottom of this level will yield 1½ ton of ore per fathom.

WEST GEBOR.—John Andrews, Oct. 15: The res little or no change in the lode is either the 5 or 30 ends west during the past week, but I am pleased to pay the ground by the side of the lode

WEST PATELEY BRIDGE.—D. Williams, Oct. 16: East Grassington: In the 27 fm. level cast the improvement foreshadowed in my report of the 2nd inst. has already occurred, and the lode to-day is 2% ft. wilde, filled with gossan sulphate of syries, with branches and patches of rich lead ore; worth over 50 certs, per fathom, and looks like lasting; and we have a quarter of a mile of barring ground in this direction. The west end is without change to notice. We have a parcel or ore in course of smelting.

THE MINING JOURNAL

THE MINING JOURNAL*

THE MINING JOURNAL

**THE MININ

PROVINCIAL STOCK AND SHARE MARKETS.

CORNISH MINE SHARE MARKET.—Mr. S. J. DAVEY, mine share-dealer, Redruth (Oct. 16) writes:—Until to-day our market has been very flat this week, and prices very slow. Prices declined. To-day Dolocath shares are at 68 to 69, after being 63 to 64 yesterday. East Pool, Tincroft, West Kitty, and Wheal Agar are also better. Tin standards fell 3s. on Monday. Subjoined are the closing quotations: —Carn Brea, 1½ to 2; Cook's Kitchen, 10 to 11; Dolocath, 68 to 69; East Pool, 37 to 39; Killifreth, ½ to ½; New Cook's Kitchen, 1 to 1½; New Kitty, 1 to 1½; New Kitty, 1 to 1½; New Busyles, 1 to 2s.; Pedn-an-drea, 3 to 3; Polberro, 1½ to 2½; South Ondurrow, 8½ to 35; South Crofty, 1¾ to 2½; South Wheal Frances, 6½ to 7; Travannance, 1½ to 2; West Basset, 1½ to 1½; West Wheal Ston, 2 to 3; Wheal Agar, 18 to 16½; Wheal Basset, 2 to 2½; Whest Wheal Ston, 2 to 3; Wheal Agar, 18 to 16½; Wheal Basset, 2 to 2½; Whest Wheal Ston, 2 to 3; Wheal Kitty, ½ to 5½; Wheal Uny, ¾ to ½.

— Messes, Arbort and Wickert, stock and share brokers, Redruth (Oct. 16), write:—We have again to report lower prices for mining shares, but the market closed firmer to-day with a fair demand for Dolocaths, Wheal Agars, and Tincrofts. Closing prices herewith:—Camborne Vean, 5x, to 6s; Carn Brea, 1½ to 2; Cook's Kitchen, 10 to 12; Dolocath, 68 to 69; East Blue Hills, ¾ to ½; East Pool, 38 to 39; Killifreth, ¾ to ½; New Cook's Kitchen, 1to 11½; New Kitty, 1½ to 13; west Polocath, 68 to 69; East Blue Hills, ¾ to ½; East Pool, 38 to 39; Killifreth, ¾ to 8; New Cook's Kitchen, 1to 11½; New Kitty, 1½ to 2; South Brances, 6 to 65½; Tincroft, 6½ to 7; West Basset, 2 to 2½; Wheal Genwille, 5½ to 6; West Polocen, ¾ to 5; West Belocon, 1to 14½; Carn Brea, 1½ to 5; West Seton, 3 to 4; Wheal Agar, 16 to 16½; Wheal Basset, 2 to 2½; Wheal Genwille, 5½ to 6; West Polocen, ¾ to 5; Cook's Kitchen, 10 to 10½; Dolocath, 63½ to 6; West Ritty, 9 to 9½; South Cornisla, 12 to 14½; Carn Brea, 1½ to 1½; Carn Brea, 1½ to 1½; Carn Brea, 1½ to 1½; Carn

Wheal Uny, \$\frac{1}{2}\$ to \$\frac{1}{2}\$.

— Mr. John Carter, mine sharedealer, Camborne (Oct. 16), writes:—The share market after being very flat throughout the week with daily declining prices has to-day somewhat recovered in sympathy with the reaction in the tin market. Dolcoaths have advanced 4, East Pools 20s., and Tincorfts 10s. On Oct. 13 the tin standards were reduced 3s. The following are the closing quotations:—Carn Brea, 1\frac{1}{2}\$ to 10\frac{1}{2}\$ to 10\frac{1}{2}\$ to 10\frac{1}{2}\$ to 10\frac{1}{2}\$ to 10\frac{1}{2}\$ to 10\frac{1}{2}\$ to 1\frac{1}{2}\$ fo 0\frac{1}{2}\$ to 1\frac{1}{2}\$ to 1\frac{1}{2}\$ fo 0\frac{1}{2}\$ to 1\frac{1}{2}\$ to 1\frac{1}{2}\$ fo 1\frac{1}{2}\$ to 1\frac{1}{2}\$ fo 1\frac{1}{2}\$ to 1\frac{1}{2}\$ fo 1\frac{1}{2}\$ for 1\frac{1}{2}\$ fo 1\frac{1}{2}\$ for 1\frac{1}{2}\$ fo 1\frac{1}{2}\$ fo 1\frac{1}{2}\$ fo 1\frac{1}{2}\$ for 1\frac{1}{2}\$ fo 1\

MANCHESTER.-Messrs. JOSEPH R. and W. P. BAINES, shareorokers, Queen's Chambers, Market-street (Oct. 16), write: —There is very little of moment to report for the past week. The effect of is very little or moment to report for the past week. The effect of the advance in price of money was pretty well anticipated, and since the actual raising of the Bank rate no decided development of the influence has been apparent. The above remarks apply more especially to ordinary stocks and shares, but as regards preferences and debentures and similar low return investments, prices for which have recently been pushed so high, further instances of decline from the high points reached are to be noticed, and buvers are by no means so plentful as they were. Home rails are variously affected. Some traffics have given very little encouragement, and where this influence has been paramount prices are somewhat lower, but on the whols the balance of change, viewing the market all round, is but small. Poreign funds are mostly lower, Italians alone marking higher, with the exception of Byptian Unified and Daira Sanleh, which are ½ and ½ better respectively.

Reweastle Chemicals, 25s. to 27s. 5d.

EDINBURGH.—Messrs. THOS. MILLER and SONS, stock and share brokers, Princes-street (Oct. 15), write:—The stock markets have been very quiet. In Scotch railways, Highland has fallen to 90. North British and Caledonian have not shown much activity. Great North has come into some demand, and has advanced. The stock is said to be scarce. Americans have been somewhat depressed. Reading General has had a smart fall. Arizona Copper fell from 21s. to 17s. 6d., but has recovered to 19s. 9d. Rio Tinto and Tharsis have been flat. Nobels have changed value very frequently, they show a decided reduction within a week, the fail being from 15½ to 14. Arizona Truts shares, 1f. paid, have changed hands at 10s. Burntishad Oll have receded from 17 to 16½. Fumpherston from 12½ to 11½. Lanark have rison from 50s. 6d. to 61s. Midlothian from 53s, to 66s. 6d. Walkinshaw from 73s. 6d. to 62s. West Lothian from 5½ to 9½s. Young's are 1s. 3d. higher, at 11½s. Linlibgow Oil have changed hands at 21s. premium. Holmes' Oil have been asked for at 30s. premium.

THE COPPER TRADE.

Messrs. HARRINGTON, HORAN, and Co. (Liverpool, Oct. 15) .-Chill copper charters for second half of September were advised on Oct. 1 as 900 tons fine, all bars and ingots, of which 350 tons for England and 55 tons for orders Onlii copper charters for second half of september were advised on Oct. I as 300 tons fine, all bars and ingots, of which 350 tons for England and 55 tons for orders here or Continent. Price of bars was \$17:22\forall Exchange 31\forall d., since which the latter has been advised as low as 30\forall d. During the past fortnight Chili bar copper, probably owing to the decline in tin, was sold down to 53. I.2s. 6d. spot, and 54. forward. The lower prices, however, stimulated a demand, and with a fair business done at intervening prices we close at \$46. spot and 544. So forward rather buyers. The business in furnace material comprises—At Liverpool: 100 tons yellow Quebrada ore, 500 tons Rio Tinto regulus at 9a. 6d., and 1300 tons Betts Gove ore at 9a. 3d. per unit.—At Swanses: 215 tons Bolivian regulus ex Kidonan at 16s. 6d., 331 tons Bolivian regulus ex Xrince Alfred at 10s. 3d. and 10s. 6d. per unit respectively, 1025 tons yellow Quebrada ore at 9a. 6d., and 311 tons Quebrada regulus at 9a. 3d. per unit. Precipitate: 250 tons Cueva de la Mora at Swansea at 10s. 6d., 33 tons Mason's, and 100 tons Rio Tinto No. 2 at 10s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 100 tons Rio Tinto Such at 11s. 1\forall d., 200 tons Rio Tinto Such at 11s. 1\forall d., 200 tons Rio Tinto Such at 11s. 1\forall d., 200 tons Rio Tinto Such at 11s. 1\forall d., 200 tons Rio Tinto Such at 11s. 1\forall d., 200 tons Rio Tinto Such at 11s. 1\forall d., 200 tons Rio Tinto Such at 21s. 200 tons Rio Tinto Such at 21s. 200 tons Rio Tinto Such

WARTINGTO, M.C. CRITTING OF	-				
	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool		255	18,486	20	-
Swansea	*****	828	3,501		nimin.
	_				
Total		-1,083	21,987	20	
Representing about 22,495	tons fine	copper, aga	inst 22,51	8 tons Sept. 3	0; against
28,032 tons Oct. 15, 1883	: 23,205 to	ms Oct. 14.	1882: 28	.425 tons Oct	. 14, 1881.
Stock of copper contained	in other	foreign or	e and Si	panish precip	itate, 4850
tons fine, against 4288 to	ns Oct. 1	5, 1883. St	nek of C	hili bars and	ingota in
Havre, 920 tons fine, again	net 1550 to	one Oct. 15	1883 Sto	ok of Caro Oc	wo Barille
in Havre, 55 tons fine, a	mai not mil	O-4 15 10	19 Stool	of conner	other ther
in Havre, 55 tons line, a	Summe sur	Oct. 10, 100	13. BEUCH	or cobber o	ther than
Chili in Havre, 305 tons	nne, aga	mat 300 tor	na Uct. 1	o, 1883. Bloc	ew of Chil
copper affoat and charter	ed for to d	ate, 7,46 tor	as fine, ag	minst 9577 to	ns Oct. 15
1883. Stock of foreign	copper in	London, c	hiefly Au	stralian, 285	tone fine
against 3700 tons Oct. 15,					
According to the Board	of Trade	Returns th	a total ir	nnorts and as	rmorta inko
According to the Board	the first	Income in the	of the fe	il porta mira es	chorea me
and from this country for	PUG BLAR D	ine monta	of rue to	nowing years	were:-

IMPORTS.	1883.	-	1883.		1884,
Copper in oresTons	10,133		10,517		19,010
Copper in regulus and precipitate	20,262		26,242		24,306
Bars, cakes, and ingots	25,951		26,531		28,079
In pyrites, estimated	12,125	***	11,983		1",508
EXPORTS.					
English copper-wrought and unwrought	21,253		23,747		29,445
Foreign copper-unwrought	0,121	000	8,907		3,761
Yellow metal	13,975	***	14,732	*4*	14,095
Total	44,348	***	47,386		52,3.0
	Copper in regulus and precipitate. Bars, cakes, and ingots In pyrites, estimated Total	Copper in ores	Copper in cres	Copper in ores	Copper in ores Tons 10,133 10,517 Copper in regulus and precipitate 20,263 28,242 Bars, cakes, and ingots 25,951 25,951 In pyrites, estimated 12,125 11,983 Total 69,471 75,773

OUT

apple, and the herd of therd of the herd o

Devon ford's sha

ores per

ted the

it appear

dropped from the ing good Ecton,

any wa and a be

THE METAL TRADE.

FOR COPPER, TIN LEAD, &c., a MESSES. PELLY, BOYLE, AND CO., SWORN METAL BROKERS, apply to

ALLHALLOWS CHAMBERS, LOMBARD STREET, LONDON. (ESTABLISHED 1849.)

HENRY NUTT. BIRMINGHAM,

LEAD ASHES, LEAD SLAGS, SULPHATE OF LEAD, TIN ASHES, TERNE ASHES, AND ALL REFUSE CON-TAINING TIN AND LEAD.

COPPER AND SPELTER COMPANIES

DESIRING TO INCREASE their SALES and CONNECTION with Leading Houses, should send description, prices, and best Agents' terms to

HOWARD LANE AND CO., 115, 116, PALMERSTON BUILDINGS, OLD BROAD STREET, LONDON, E.C.

HENRY WIGGIN AND CO., (LATE EVANS AND ASKIN),

NICKEL AND COBALT REFINERS. BIRMINGHAM.

The Mining Market: Brices of Metals, Ores, &c.

METAL MARKET-LONDON, Oct. 17, 1884.

P. g. GMB, f.o.b., Clyde 2 1 9½-2 1 10 Scotch, all No. 1 2 2 6— 2 ms Welsh, f.o.b. Wales 417 6— Starford., 6 7 6 5 0 0— Stafford., 6 7 6 5 0 0— Swelish, London 5 7 8 - 5 10 0 R. dis, Welsh, at works. 4 17 6— Streets, Staff., in London 7 5 3 - 7 10 0 Pa (es, ship, in London 7 5 3 - 7 10 0 Pa (es, ship, in London 7 5 3 - 7 10 0 Streets, Staff., in London 7 5 3 - 7 10 0 Streets, Staff., in London 7 5 3 - 7 10 0 Streets, Staff., in London 7 5 3 - 7 10 0 Swedish, seg		
Scotch, all No. 1 2 2 6— Sats Welsh, fo.b. Wales 4 17 6— in London 5 7 6-5 10 0 Stafford, 6 7 6-5 10 0 Stafford, 7 6 7 6-5 10 0 Stafford, 7 6 7 6-5 10 0 In Tyne or Tees 5 0 0— Swedish, London 3 15 0-9 15 0 Rails, Welsh, at works 4 17 6— Sheels, Staff, in London 7 10 0-8 0 0 Hops, Staff, in London 7 5 3-7 10 0 Hops, Staff, in London 7 5 3-7 10 0 Street.		
Cars Welsh, f.o.b. Wales 4 17 6-	Pg, GMB, f.o.b., Clyde 2 1 91/2-2 1 10	English, ingot, 1.0.b 78 0 0- 79 0 0
No. No.	., Scotch, all No. 1 2 2 6	** Dars ** 79 0 0- 80 0 0
Stafford,	Sars Welsh, f.o.b. Wales 4 17 6-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
In Tyne or Tees 5 0 0 - Swedish, London 8 15 0 - 9 15 0 Rails, Welsh, at works 4 17 6 - Pa'es, ship, in London 7 5 3 - 7 10 Pa'es, ship, in London 7 10 0 - 8 0 0 Hops, Staff, in Lon. 6 7 6 - Strake 12 0 0 - 18 0 Cast 30 0 0 - 45 0 0 Swedish, keg 13 0 0 - 14 0 0 Rails at works 5 12 6 - 6 12 6 Rails at works 5 12 6 - 6 12 6 Rails at works 5 12 6 - 6 12 6 Rails at works 5 12 6 - 6 12 6 Rails at works 5 12 6 - 6 12 6 Rails at works 5 12 6 - 6 12 6 Rails at works 5 12 6 - 6 12 6 Rails at works 5 12 6 - 6 12 6 Rails at works 5 12 6 - 6 12 6 Rails at works 5 12 6 - 6 12 6 Rails at works 5 12 6 - 6 12 6 Rails at works 12 6 - 11 5 0 Rails at works 13 0 - 14 10 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Rails at works 14 12 6 - 13 5 0 Ra		Australian
Name		
Rails, Welsh, at works. 4 17 6— Sheets, Staff., in London 7 5 3 - 7 10 Pailes, ship, in London 7 10 0 - 8 0 0 Pailes, ship, in London 7 10 0 - 8 0 0 Hope, Staff., 6 7 6 - — Nill rods, Staff., in Lon. 6 7 6 - — Rill poils, Staff., in Lon. 6 7 6 - — English pring 12 0 0 - 18 0 0 cast 30 0 0 - 40 0 0 Swedish, keg 33 0 0 - 14 0 0 Rails at works 4 12 6 - 5 12 6 Rills at works 4 12 6 - 5 12 6 Mills of the roll of t	" in Tyne or Tees 5 0 0-	
Sheets, Staff., in London 7 5 3-7 10 0	., Swedish, London 8 15 0- 9 15 0	
Pates, ship, in London. 7 10 0 - 3 0 0 Hoops, Staff., in London. 6 7 6 - 6 Nil rods, Staff., in London. 6 7 6 - 6 Nil rods, Staff., in London. 6 7 6 - 6 Street. Euglish spring	Rills, Welsh, at works 4 17 6-	
H noja, Staff., in. 6. 7 6- STEEL. Euglish spring. 12 0 0-18 0 0 cast. 30 0 0-45 0 0 0 0-61 10 0 cst. 30 0 0-45 0 0 0 0-61 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sheets, Staff., in London 7 5 J- 7 10 0	Best selected 59 0 0- 60 0 0
Neil rods, Staff., in Lon. 6 7 6— Euglish spring	Pales, ship, in London . 7 10 0- 8 0 0	Sheets and sheathing. 53 0 0- 67 0 0
Euglish spring	H 10ps, Staff., 6 7 6	
Euglish spring 12 0 0-18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
Swediel, keg		
Swedish, keg	English spring12 0 0-18 0 0	
Rails at works	cast	CHILL DELD, E.O.D. SHILL GO
Rails at works 4 12 6-5 0 0 "Light, at works 5 12 6-6 12 6 "Light pig, common11 0 0-11 2 6 "LB.B 11 2 6-11 5 0 "W.B 11 5 0-11 7 6 "albest and bar 11 12 6-11 15 0 "pipe 12 5 0- "red 13 5 0-14 0 0 BRASS. PHOSPHOR BRONZE. Alloys I. and II		
Hight, at works. 5 12 6- 6 12 6 E glieb pig, common11 0-11 2 6 LB	ing. ham13 10 0-14 10 0	
E glieb pig, common 11 0 0-11 2 6 VI. and VII. 127 0 0 XI 127 0 0 XI 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Kalls at Works 7 12 6- 5 0 0	
E glish pig, common11 0 0-11 2 6 VI. and VII. 127 0 0 LB 11 2 6-11 5 0 XI. 105 0 0 XI. 105 0 0 0 XI. 105 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
" K.B		
", W.B	is giren pig, common	
sleet and bar11 12 6-11 15 0		
., pipe	" about and her 11 12 6-11 15 0	, Duro A, Duro B 100 0 0
red	nine 19 5 3	BRASS.
	13 5 0-14 0 0	Wire 63/4d
-1.ite 14 10 0-18 10 0 Tubes	" -lite 14 10 0-18 10 0	Tubes 81/4
	notant shot 14 0 0-	Sheets 614-714d.
8ish		Yel, met, sheath, & sheets 51/4-6
NICKEL. TIN-PLATES." per box	Nicket.	
Metal per cwt Charcoal, 1st quality 1 1 0-1 2 0		Charcoal, 1st quality 1 1 0-1 2 0
Ore 10 percent, per ton 2nd quality 0 18 0- 1 0 0		
Spelter. Coke, 1st quality 0 16 0- 0 16 6		Coke, 1st quality 0 16 0- 0 16 6
ilealan ordinary brands14 10 0 1 2nd quality 0 15 0- 0 16 0		2nd quality 0 15 0- 0 16 0
, special brands, 14 15 0 Blackper ton 15 10 0	special brands, 14 15 0	Black per ton 15 10 0
English Swanses	English Swanses15 5 0	
Sheet zinc	Sheet sine	

At the works, is, to is, 6d, per box less for ordinary; 10s, per ton less for mada; IX 6s, per box more than IO quoted above, and add 6s, for each X rne-plates 2s, per box below tin-plates of similar brands.

REMARKS.—Our markets continue in anything but a satisfactory condition, and there are no fresh features of any importance. Each market has apparently its own peculiar characteristic. One is noted for the utter stagnation in the demand, another for irregular prices, condition, and there are no fresh features of any importance. Each market has apparently its own peculiar characteristic. One is noted for the utter stagnation in the demand, another for irregular prices, a third for being favourable, statistically speaking, deliveries in excess of supplies, and yet prices about the lowest point at which they have ever been known, and so on, other metals having also special features connected with all them: but yet, notwithstanding these differences, there is that which all them: but yet, notwithstanding these differences, there is that which seems general amongst traders now is to minimise losses, for profits are almost altogether out of the question. The outcome of this mastisfactory state of affairs we will not venture to predict, suffice it to state the bright prospects of the autumn have now been thrust away, and we have nothing before us but a dark, uncertain future. Many holders have been thoroughly wearied out; their patience has been more than exhausted, the results of which we have strikingly had brought before us during the past few weeks in the case of tin, in which enormous sacrifices have been made in prices. At times some other metals threatened to follow in the same course, but holders have been too strong, and no serious fall has elsewhere been effected. But by this time it would seem even in in as well as other metals weak holders must in great measure have been cleared out of the market, and that being so, we may expect steadier markets, and possibly slightly better prices. The tendency however towards the latter part of the week has in some instances being towards hardening prices. Oupper is a little stiffer than it was, iron is also somewhat atronger, and tin does not close at its worst point, therefore we find a turn, slight it may be, but yet a turn in the right direction, and we have on previous occasions pointed out, the little factors and the substantial restoration; but some slight recovery there may be, not only on account of the market will not esta

therefore, requisite to reverse it before the desired change can be thoroughly and permanently effected.

COPPER,—This market has been steady but quiet, and the changes that have been effected have been but trivial. Yesterday the Chili charters for the first half of October were advised as 2800 tons, a quantity which, though large, produced very little effect upon the market, and the official quotation was the same as on the previous day. At the close of last week prices for Chili bars fell rapidly, but they have since recovered, and the threatened heavy fall has been averted, or at least for a time. The price stiffened on Monday to the extent of 2s. 6d., and on Tuesday further improved to the same extent; but has since shown no change. The deliveries for the first fortnight of the month are again reported large, which is very satisfactory considering the large charter that has also been announced, the one feature about counterbalancing the other; hence the steadiness of the market. In other descriptions of copper—that is to say, excepting Chili bars—quotations are the same as they were a week ago.

The smelters are still said to be fairly busy with the orders they have in hand, and from some of them speedy deliveries during the past few weeks. There being a good demand for manufactured, the raw material is necessarily also in request, and consequently we find a continued diminution in stocks. However, supplies are large, but this is not an unfavourable feature when deliveries are not only large, but in excess of them. The only feature in the market to which complaint can be raised is the low prices, which are said to leave an inadequate return to the suppliers. However, this has also its bright side, for unquestionably it is the very low prices that are causing such an increase in the demand, and constantly enlarging the requirements of the trade for all descriptions of copper.

IRON.—There is still a wast amount of inactivity in this market.

IBON.—There is still a vast amount of inactivity in this market and no branch of the trade can be reported sound. There is no new feature to report, but old effects in strong force still remain to in-crease the stagnation, and to prolong the intensity of the depression Shipbuilding is almost at a standstill; many of the works are closed. none of them said to be in full operation. Prices cramble away, increasing the already heavy losses upon this metal, and many men are out of employment.

Public attention has lately been directed to the increasing distress and misery brought upon the poorer classes of the inhabitants of Sunderland, caused almost entirely by the slackness of the shipbuilding trade. Already the percentage of mortality amongst infants and the weaker population has vastly increased, and the cry, "Help us, or we perish," has already been raised in earnest appeal to the charity of the English community at large; and this appeal will doubtless be met by that practical liberality which is ever a national characteristic in cases of emet by that practical liberality which is ever a national characteristic in cases of emet by that practical liberality which is ever a national characteristic in cases of emet by that practical liberality which is ever a national characteristic in cases of emet by that practical liberality which is ever a national characteristic in cases of emet by the same that the distress of the content of the works, as we have already said, are now closed, others but partially employed, and the short time that they are working seems to be out partially employed, and the short time that they are working seems to be out partially employed, and the short time that they are working seems to have passed, by, the same rate of wages as heretofore, and, therefore, it seems inevitable that the distress must spread far and wide. There is nothing to stop it—everything to promote it. The last hope of trade revival this year seems to have passed, by, the autumn has more than half passed away, and no symptoms of returning activity are yet visible.

The whiter is at hand, and the trade may be expected to linger on in the same lifeless and uninteresting way as it has done for a long time past. Sellers are now all anxious to obtain orders; they compete keenly one against another, and although they do occasionally show hesitation before accepting fresh orders, it is because the limits connected therewith are so exceptionally low that they are slow to make further concessions. The advices f

which also being altogether unable to successfully compete with manufacturers facturers being altogether unable to successfully compete with manufacturers in the North.

TIN.—This market has been very unsettled, and prices have continued to fluctuate considerably. At the beginning of the week it was evident that the desire to push down prices and "bear" the market had in no way subsided, and as weak holders continued to freely effect sales, the market fell away without the least check until Wednesday morning, when 721. 152. was accepted for each parcels of foreign. Wednesday morning, when 721. Iss was accepted for eash parcels of foreign. This figure, however, seemed to attract the attention of operators, being 101. or 111, per ton below what was ruling a few weeks back, and which in its turn was considerably less than what we have been accustomed to for some years past. The consequence was that where selling had previously existed, buying was substituted, and the very favourable figure to effect purobases being realised, business was soon characterised by briskness, and in the course of that day a recovery of fully 10s. was effected, this advantage being further followed up yesterday by another 20s, per ton, and to-day the demand has been extremely active, and considerably higher prices paid, the closing quotation for Straits being 752.

being 754.

Now that the turn in an upward direction has been started, it is not unlikely that prices may pick up considerably what they have lost during the last few weeks, because it must be borne in mind that the fail was occasioned from a feeling of panic and not from any adverse feature in the market, and that being the case a sharp rebound is not at all improbable, and the advance which has now been started may be speedily developed and prices further enhanced. Australian still continues to realise a much better price than Straits, there being adifference in the quotation of some 20s. or 3's. per ton.

SPELTER is unchanged, ordinaries being quoted at 14'. 10s., and special brands at 14'. 15s. per ton.

LEAD is quiet, and there is no change to report, 10'. 15s. to 10'. 17s. 6d. being the price for Spanish, and 11'. to 11'. 2s. 6d. for English.

-The alterations in this market are trivial, business still being limited, and prices steady.

TIN-PLATES.—A very fair business continues to be transacted, and prices for both cokes and charcoals are the same as last

QUICKSILVER.—Importers have not changed their price, but cond-hand parcels are on offer at 51. 9s.

The MINING SHARE MARKET has been very dull and depre again this week, owing to the further fall in tin; and the dealers have been chiefly occupied in the settlement of the usual fortnightly account. The chief feature of the market is that the best mines have had the greatest fall, as they are likely to be affected in their have had the greatest fall, as they are likely to be allected in their dividends; while speculative mines with fair prospects have not been so much affected. From the highest to the lowest point reached by Dolcoath during the present month there has been a fall of 10*l*. per share—from 74 to 64. East Pool from 41 to 37. South Condurrows have fallen 1*l*. West Kitty, 1*l*. Tincroft, 1*l*. West Frances and many others in proportion. The tendency now appears to be upwards; and the mines chiefly dealt in have been Dolcoath, East Pool, West Kitty, Wheal Grahov, Prince of Wales. Tincroft, Leadhills, and a few rances and many others in proportion. The tendency now appears to be upwards; and the mines chiefly dealt in have been Dolcoath East Pool, West Kitty, Wheal Agar, West Frances, East Blue Hills, Wheal Crebor, Prince of Wales, Tincroft, Leadhills, and a few low-priced foreign mines.

Tim.—The standard for ore again declined this week 3l. per ton,

TIN.—The standard for ore again declined this week 3l. per ton, and tin mines became very flat and depressed in prices. On Thursday tin rose, and there was an appreciable reaction in many shares, particularly in Dolcoath. Cook's Kitchen are quoted 10½ to 11½: Carn Brea, 1½ to 1½. Dolcoath declined to 64, but rallied, and leave off 67 to 68. East Pool, 38 to 39. East Blue Hills, 4s. to 6s.; the shaft is again in process of sinking for another level, worth 10l. per fathom; other points make up the value to 35l. per fathom. New Kitty, 1½ to 1½. South Condurrow have declined to 7½, 8. South Frances, 6½ to 6½; Tincroft, 6½ to 7; Tresavenn, ½ to ½; Trevaunance, 1½ to 2½; West Basset, 1½ to 1½; West Frances, 4½ to 5½; West Kitty, 9½ to 10; Wheal Agar, 16 to 16½; Wheal Basset, 1½ to 2½; Wheal Grenville, 5½ to 6; Wheal Kitty (8t. Agnes), 10s. to 15s.; Wheal Uny, ½ to ½. Killifreth, 5s. to 7s. 6d.; at the meeting the accounts showed a loss of 805l. on four months' working, and a call of 3s. per share was made. The tin sold—42 tons—realised 1891l. The report was favourable, Polberro, 2 to 2½; West Godolphin, 1 to 1½. 1 to 11.

COPPER keeps firm, but there is only a moderate business doing in COPPER keeps firm, but there is only a moderate business doing in shares, though there are more enquiries than usual for low-priced shares. Bedford United are quoted 1½ to 1½; Devon Great Consols, 2½ to 2½; Gunnislake (Clitters), ½ to ½; Marke Valley, ½ to ½; Mellanear, ½ to 1. New West Caradon, 2s. 6d. to 3s. 6d.; the lode lately cut here is yielding rich stones of copper ores. Ecton, 2 to 2½; Prince of Wales, 6s. to 8s. West Crebor, 2s. to 2s. 6d.; the ground here is grating easier and promising for one. Wheal Crebor, 1k to Prince of Wales, 6s. to 8s. West Crebor, 2s. to 2s. 6d.; the ground here is getting easier, and promising for ore. Wheal Crebor, 1½ to 1½. At South Penstruthal a branch of ore has been cut in the 126, west of engine-shaft, on the north wall of the lode. Devon Friendship, 2s. 6d. to 3s. 6d.; there are 11 bargains set, including driving, cross-cutting, sinking, &c., at a total cost of 34l. 3s. per fathom, the aggregate value of the same being 76l. 10s. New Cook's Kitchen.

the aggregate value of the same being 76%. los: New Cook's Kitchen. \$\frac{1}{2}\$ to 1; South Caradon, \$\frac{1}{2}\$ to \$\frac{1}{2}\$; West Seton, \$\frac{1}{2}\$ to \$\frac{1}{2}\$; Lead is firmer, and should it advance, as generally expected, there will be more business doing in lead mines, which for some time past have been very much depressed. Vans are quoted \$\frac{1}{2}\$ to \$\frac{1}{2}\$; Great Laxey, \$\frac{1}{2}\$ to \$\frac{1}{2}\$; Roman Gravels, \$\frac{1}{2}\$ to \$\frac{1}{2}\$ to \$\frac{1}{2}\$; South Darren, 4s. to 6s.; the 130 west is worth \$1\$ ton silver-lead per fathom. In the 130 east the end is improving, worth \$1\$ ton of copper, and \$5\$ to 6 cwts. silver-lead ore per fathom. The agent is of opinion that they are entering on a course of ore. East Wheal Rose, \$5\$ to \$7\$ s. 64\$; Leadhills have been in request at \$1\$\$ to \$1\$\$; Old Shepherds, \$\frac{1}{2}\$ to \$\frac{1}{2}\$; Standard, \$1\$\$ to \$1\$\$; Weardale, \$1\$\$ to \$1\$\$.

Foreign Mines.—There has been a considerable amount of busi-

ness doing in shares of established foreign mines, such as Cap Copper, Rio Tinto, Scottish-Australian, and other regular dividend Copper, Rio Tinto, Scottish-Australian, and other regular dividend, paying concerns; but speculative undertakings are quite neglected, although quoted at the same price as last week. Akankoo as quoted 3-16ths to 5-16ths; the meeting (reported in another column) was not a very satisfactory one. Alamillos, 1\frac{1}{8}\$ to 1\frac{1}{8}\$; Almada and Tirito, 1-16th to 3-16ths; Australian, 1\frac{1}{8}\$ to 2; Balkis, 3-16ths to 1\frac{1}{8}\$ inches a price as soon as ready, and a heap to soon of copper ore, has arrived at Swansea, and is now being discharged; 200 tons more will be shipped as soon as ready, and a heap of 300 tons is being got ready for calcining.

Callao Bis, 5-16ths to 7-16ths; Cape Copper, 42 to 43; Chile Gold, 1s. to 2s.; Chontales, 1-16th to 3-16ths; business at \frac{1}{8}\$. Colombia Hydraulic, \frac{1}{8}\$ to \frac{1}{2}\$; Colorado United, \frac{1}{3}\$ to 2\frac{1}{8}\$; Frontino and Bolivia, \frac{3}{8}\$ to \frac{3}{8}\$; General Mining, \frac{5}{3}\$ to \frac{6}{4}\$; Indian Consolidated, 1-16th to \frac{3}{8}\$. Kapanga, 1-16th to 3-16ths; a telegram from states that in a further test-crushing 20 tons of stuff gaves yield of 20 ozs. of gold with prospect of improving. La Plata Mine 400 tons on the content of the cont

3-16ths to 5-16ths; during the first half of October the ore received from other mines was 3300; from La Plata Mine 400 tons on smelted 2600 tons; bullion produced, 250 tons; silver produced, 50,000 ozs. Lisbon-Berlyn, 3-16ths to 5-16ths.

Mason and Barry, 9\(^2\) to 9\(^2\); Mysore Gold, \(^1\) to 1; New Emma, \(^1\) to \(^1\); New Potosi, \(^1\) to \(^1\) it Orse Gold have advanced to 1 for the 10s. paid shares, but leave Gold have advanced to 1 for the 10s. paid shares, but leave weaker \(^1\) to \(^1\); Paunloillo, 3\(^1\) to 3\(^1\); Port Phillip and Colonia 1-16ths to 3-16ths; Quebrada Railway, 3\(^1\) to 4; Richmond, 3\(^1\) to 1\(^1\) xi, and much business doing; ditto, bonds, 9\(^1\) to 1\(^1\) to 1\(^1\) xi, and much business doing; ditto, bonds, 9\(^1\) to 9\(^1\); ditto, New, 1\(^1\) to 1\(^1\); Sierra Buttes, 1\(^1\) to 1\(^1\) xd.; ditto, Plumas Eureka, \(^1\) to \(^1\) xd.; ditto, 1\(^1\) to \(^1\) xd.; ditto, 1\(^1\) to \(^1\) xd.; of \(^1\) to \

The MARKET FOR MINE SHARES on the Stock Exchange has been The MARKET FOR MINE SHARES on the Stock Exchange has been very dull, except for foreign mine shares, in which there has been considerably more activity. Bio Tinto have been largely dealt in, and the prospects of the undertaking are considered good. It is stated that an important Mexican enterprise will be put upon the London market, probably next week. The property consists of the Trinidad Mine and considerable surface land in the Tahecrepi district, and the Bronces property, with some very rich coal lands in the Ures district. The sale to the representative of the English promoters has been concluded at Magdalena, through Mr. A. Willard, the United States Consul there, and the price fixed and agreed to 300,000£. In gold, payable on or before Jan. 1, 1886. The drifts and tunnels already made are estimated at more than 14 miles in length, so that it is one of the largest mines in Mexico. It is confidently believed that at this price capitalists may obtain a fair interest upon believed that at this price capitalists may obtain a fair interesting their investment, and it is said that work will be immediately recommenced. If Mexican mines be put on the English market at bedrock prices the profits will be ample, but overloaded capital accounts are equally prejudicial to Mexican mineowners and British share-bolders.

holders.

Our usual telegram from Cornwall this evening says:—The further reduction of 3t. in the tin standards has caused transactions in the Cornish Share Market to be restricted, and many shares have been almost neglected. The general opinion is that the depression is only temporary, and that the recovery will be just as rapid as the decline was. It is satisfactory to find that consumption keeps up, and deliveries are good. Symptoms of recovery in price are now being exhibited, and latest quotations in shares are better, and the general tone of the market is stronger. Some amount of attention is being attracted to the position of copper, the prospects of which are looking much more hopeful. Dealings in shares during the week have been mainly confined to Dolcoaths, Agars, West Frances, Carn Breas, Killifreths, and Tincrofts. Should tin still continue to improve, doubtless an active market may be witnessed in the coming

week have been mainly confined to Dolcoaths, Agars, West France, Carn Breas, Killifreths, and Tincrofts. Should tin still continue to improve, doubtless an active market may be witnessed in the coming week. At Killifreth meeting the accounts showed a loss of 80%, and a 3s. call was made. It is understood that a parcel of tin taken to the smelters to-day was not settled for, but the price left open; this is regarded as hopeful and encouraging.

Messrs. Morton, Rose, and Co. invite subscriptions for Argentise Republic Santa Fé Six per Cents., the present issue being of 409,836. In bonds of 10001., 5001., and 1001., the balance of a maximum loss of \$7,000,0001. The principal is repayable on Aug. 1, 1914, unless previously redeemed by the sinking fund. The interest, which will fall due on May 1 and Nov. 1, will be paid by Messrs. Morton, Rose, and Co., the first coupon for six months being payable on May 1, 1835. The issue price is 861. 10s. per cent., payable in instalments extending to 185. 185. so that the bonds yield within a fraction of 7 per cent. as an investment. The bonds, besides being secured upon the general revenues of the Province, have as a special security the proceeds of direct contributions, as the receipts from the sale of Government lands. The Provincial Bank of Sant Fé is further directly responsible for the principal and interest of this loan, all its assets being specially pledged therefor. The Province of Santa Fé is cased the most fertile and productive of the Argentine Republic. Its rich and progressive character is well known, and it is every day becoming more important A large proportion of the emigrants from Europe going to that part of America settle there. The principal city, Rosario, has a population of \$5,000, and rask as second in importance in the whole Republic, and from it starts the Centil Argentine Railway. A railway in course of construction will bring Rosario interest of the largest tonnage.

The South Staffordshire and Birmingham District Steam Tram-

ricct communication with purious and at the port has facilities for admitting cation with Liverpool and Antwerp, and the port has facilities for admitting species of the largest tonnage.

The South Staffordshire and Birmingham District Steam Trambilly and Lightities Act. with an and District Stanting ways Company, registered under the Limited Liabilities Act, with an authorised capital of 300,000%, are inviting subscriptions for 60,000%, in 10% shares, the balance of capital not subscribed. The company has obtained Parliamentary powers for the construction of nine different lines, uniting the most important towns in the Black Country. These towns contain a dense population of the industrial classes, who will, as has been proved by experience, readily await themselves of the great stanting that the stanting the stanting that the stanting the stanting that t These towns contain a dense population of the industrial classes, who will, as has been proved by experience, readily avail themselves of the grest sevantage of steam tramways. A steady and daily traffic may be expected from this source, as the working classes to a great extent in this district live at all tance from their employment. It is calculated that the use of steam-powr over these lines will cost considerably less than horse traction, and at the ams time render it possible to convey goods and minerals as well as passenger. The company has obtained Parliamentary powers for this description of traffic, and it is expected that consideral le business will come to the company of the kind. At the present time the large quantities of earl and other minerals set at the numerous works in this district have to be carted at a heavy rate to add from the works, and the facilities offered by the present tramway aystem will probably command a considerable portion of this trade at a tariff which will give equal satisfaction to the manufacturers and the company. A special feature also is to be the carriage of light goods and parcels. The authorised length of the heavy traffic expected it is being laid in the most substantial maner, steel girders being used throughout, and being paved with granite. It tistended to work the goods traffic at night. Part of the line is already complete, and at work, and the remaining portion is being rapidly pushed forward, Large quantities of engines and rolling stock have been delivered, and extensive engine and car sheds are almost completed.

The Commercial Bank of Australia, and the Colonial Bank of Australasia, as agents of the Metropolitan Gas Company of Melances.

Australasia, as agents of the Metropolitan Gas Company of Melbourne, invite subscriptions for a loan of 197,500*l*. in 5 per cent. debentures of 100*l*. each. The interest will be payable on April 1 and Austraiasia, as agents of the Metropolitan Gas Company of Melbourne, invite subscriptions for a loan of 197,500L in 5 per cent. debentures of 100L each. The interest will be payable on April 1 and Oct. 1 in each year in London, where the principal is also payable on April 1,1910. The first coupon will fall due on April 1 next. The debentures are secured upon the undertaking, rates, and other revenues, including freehold properties of the assessed value of about 500,000L of the company. The company has the monopoly of gas supply in Melbourne, and Its gross revenue shows a steady increase, as does also the dividends paid by the company, which have risen from 8 per cent. to 13 per cent. The company authorised capital is 1,000,000L, of which 57,210L, has been issued and paid-up. The reserve fund has amounted to 22,500L, and the debenture debt, including the present issue, will be 557,000L.

The Creaswell Ranche and Cattle Company, with a capital of 320,000L, divided into 64,000 (5L) shares, is formed to purchase for 294,520L the Creaswell Ranche, belonging to H. W. Creaswell and Company, and to carry on the business of ranching and dealing in cattle. This ranche, which is situated in the Panhandle of Tess, one of the best grazing districts of the United States, has in its possession a large and valuable area of freehold land (150,000 acres, which are passession a large of capital states of the United States, has in its possession a large and valuable area of freehold land (160,000 acres, which are passession a large of capital states of the United States, has in its possession a large and valuable area of freehold land (160,000 acres, which are passession a large of capital states of the United States, has in its possession as large and valuable area of freehold land control by its water rights are forces adjacent grazings over an area of about 1,000,000 acres, which are passession of the passes of the land of the contains god.

presente to inspe This rep roughly placed was clo stateme if not t 33 per Kit I

north u

produci South ting pla

good lo

New ons qu 30 stan buyers

Rul

advan as it havir prove adit 6 to Re

day. owin

s Cape vidend-clected, coo are column)

olumn)
da and
is to 4;
out 230
ng dis
la heap

e Gold, embian

to 24; no and idated, om the

Plata, Beceived one ore, oduced,

Oscar ave off clonial, to 4; ds, 98; lian, 21; ditto,

s been been alt in, It is

on the

d tois ts and ength, dently

t upon ely re-it bed-sounts share-

arther in the

ps up, e new

nd the ention which

g the ances, aue to

805l., of tin e left

entine loan

h will Rose, lay 1,

pany dif-

rard, naive

k of Mel-de-

The

for and

better things which are necessary to successful ranching. The herd, it is a short of about 37,500 head of cattle, is also said to be unequalled. In additional times there is included in the purchase 150 saddle horses and mules, five so is these there is included in the purchase 150 saddle horses and mules, five of the mowing machine, and all other necessary implements. The companys, one was a second two experienced managers in Mr. R. G. Head and Mr. James secured two experienced managers in Mr. R. G. Head and Mr. James secured two experienced managers in Mr. R. G. Head and Mr. James of the managers of the second managers in Mr. R. G. Head and Mr. James of the second managers in Mr. R. G. Head and Mr. James of the second managers in Mr. R. G. Head and Mr. James of the second managers in Mr. R. G. Head and Mr. James of the second managers in Mr. R. G. Head and Mr. James of the second managers in Mr. R. G. Head and Mr. James of the second managers in Mr. R. G. Head and Mr. James of the second managers in Mr. R. G. Head and Mr. James of the second managers of the seco

peron Great United, # to #; the lode in the 120, west of Willes-led's shaft, continues to yield 2 tons of good copper and mundic ors per fathom, and its general character is of a very promising

palare.

Drakewal's, ½ to ½; it was mentioned last week that it was anticipated that the engine-shaft would be down to the 102 fm. level. This, appears, has been accomplished, and around the point mentioned all has been found strong and secure, so that the pitwork will be tropped to this depth as soon as possible, as well as the skip-road com the 92 to the bottom of the mine. The north lode is productive that the production of the mine. ing good tin ore.

from the 92 to the bottom of the mine. The north lode is producing good tin ore.

Ecton, 2 to 2½; an exceptionally satisfactory meeting of this company was held on Wednesday, and is fully reported in another column, at which the accounts and reports were unanimously adopted, and a hearty vote of thanks passed in favour of the directors and the local manager for the care and economy which they have practiced in administering the company's affairs. A special report was presented, made by Mr. Wm. Sowerby, C.E., F.G.S., who had been inspect the company's mines at the request of the directors. This report states that the mines are being developed in a thoroughly satisfactory and economical manner, and are opening out a large extent of rich ore ground. Mr. Sowerby, who attended the meeting, stated that from his experience of copper mining in all parts of the world he confidently believed that the discoveries recently made at the Ecton Company's property placed the shareholders upon the eve of a startling success. He was closely cross-examined by the shareholders present; but his statements could not be shaken, and he likened the Ecton Mines to a second Rio Tinto, stating that it would not be long before hundreds, if not thousands, of men would be required to extract the ore any prepare it for market. He also remarked upon the fact that the Ecton ore is of a very high quality, it showing upon assay 15 to 33 per cent. of copper, and that it is also very abundant. The hares have been in good demand since the meeting, and the latest news from the mines is to the effect that the new discoveries continue to improve.

Kit Hill Greak Consols. \$\pm\$ to \$\pm\$: the tunnel level has been driven

news from the mines is to the effect that the new discoveries octime to improve.

Kit Hill Great Consols, \$\frac{1}{2}\$ to \$\frac{3}{2}\$; the tunnel level has been driven during the past week 13\$ ft. The lode in the north engine-shaft, sinking below the 100, previously underlying south, has taken a north underlie, and producing tin ore. The 100 east and west is also

north underlie, and producing tin ore. The 100 east and west is also preducing tin ore.

South Devon United, \(\frac{1}{2} \) to \(\frac{1}{2} \); good progress is being made in cutting plat in bottom of the 120 west, which will be finished this week, when Martin's shaft will be resumed sinking below this level in a good lode of ore. The lode in the 120, west of this shaft, has improved: now 4\(\frac{1}{2} \) ft. wide, and worth 16\(\frac{1}{2} \), per fathom. The No. 1 stope, in the back of this level, is worth 12\(\frac{1}{2} \), per fathom; whilst No. 2 stope has improved from 9\(\frac{1}{2} \), to 14\(\frac{1}{2} \), per fathom.

New Potosi, \(\frac{1}{2} \) to \(\frac{3}{2} \); a telegram just received says:—501 to 525 tassquartz milled; 726 to 750 ozs. gold on hand; 13 days' full work; 30 stamps running.

New Potosi, \$\frac{1}{4}\$ to \$\frac{3}{4}\$; a telegram just received says:—501 to 525 tonsquartz milied; 726 to 750 ozs. gold on hand; 13 days' full work; 30 stamps running.

Rio Tinto, 14\frac{1}{2}\$ to 14\frac{1}{4}\$; ditto, Bonds, 98\frac{1}{2}\$ to 99\frac{1}{2}\$; ditto, Second Mortgage, 92\frac{1}{2}\$ to 93\frac{1}{2}\$; a dividend of 10s. per share has been declared. The directors report that the deliveries of pyrites to the buyers for the first nine months of this year have been quite equal to those of last year to the same period. The production of copper at the mines will show an increase; but the fall which has taken place in the rice of the metal is a heavy one, and it is not expected that the increased production will be sufficient to counterbalance it, as was the case last year. The directors have accordingly decided upon declaring an interim dividend of 10s. per slave instead of 12s, as on the last three occasions. At the same time, they confirm, in the strongest manuer, the statements regarding the future working of the company made by them in the last annual report, and in the speech of the Chairman when presenting that report at the samual general meeting. These details were, in substance, as follows:—The mines is prepared for the output of the next and following years, necessary to respect the larger sales of pyrites amount to nearly 400,000 tons against a previous maximum of 233,000 during the existence of the agreement with the Tharsis Company and Mason and Barry, which closes with the end of the present year. The prices in the new contracts are only slightly less than those of the combination, so that even were copper further to decline, a larger revenue from this succe than hereofore will accrue to the company. The contracts referred to ran over three, and in some cases over five and six, years. The copper production at the mines will continue steadily to increase, as well from the extensive basp of mineral already under treatment, as from the additional works now in come of being arranged a

Ruly and Dunderberg, 7-16ths to 9-16ths; the usual report continues to refer almost entirely to the Lord Byron Mine, where work is going on satisfactorily; an extra force of four men have been put to work this week, thus increasing the miners to 13 at this mine; the cut-turn shortly should therefore increase. Fair returns continue from the Dunderberg Mine, but the number of tributers here have fallen off.

ave fallen off.
In LEAD MINE SHARES there has been a little more doing, owing the week having ob-In I.EAD MINE SHARES there has been a little more doing, owing to lead mines which have made sales during the week having obtained better prices for their produce. A correspondent writes that the lead market has improved during the week, both for pig-lead and lead ores. Some large sales of pig-lead have been made at an advance of 7s. 6d. to 12s. 6d. per ton, and about a similar advance has been made for some home and foreign lead ores, and it is believed that a further considerable advance in price will shortly take place, as it is understood that the stocks in this country have considerably decreased.

Leadhills, 1½ to 1½, ex dividend of 1s. 6d. per share paid to the shareholders on Thursday. There has been an increased enquiry for these shares during the week, a good demand for pig-lead having set in. The mines are reported to have considerably improved in driving both north and south, especially in Gripps deep adit south and the 10 fm. level under it, which two points are worth 6 to 7 tons of lead ore per fathom.

Roman Gravels, 3½ to 4½, ex div. of 2s. 6d. per share paid on Thursday. The shares have been reported in good demand all the week, owing to the greatly improved value of the different points of operation, as will be seen by the manager's report this week, which shows the mine continues to open out well in the levels driving south. The next sale of lead ore is expected to bring a much better price, owing to the improved demand for pig lead.

The Schwabs Gally Diamond Mining Company (De Beers Mine) Limited statement for the month ending Aug. 31 shows—Blue ground hauled, 4353 loads; washed, 4058 loads; diamonds found,

8452‡ carats, valued at 4160l. 18s. 1d.; sold, 3651 carats, realising 4365l., the total working expenses being 2610l. 17s. 2d.

The South London Tramways Company traffic returns for the week ended Oct. 11 were 1230l. 14s. 6d.; for corresponding week last year, 841l. 9s. 7d.; from Jan. 1 to date, 48,394l. 6s. 7d.; for corresponding period last year, 25,258l. 1s. 7d.

The deferred warrants for the unpaid coupons on the First Mortgage bonds of the New York, Pennsylvania, and Ohio Railroad Company will be received for exchange into bonds on and after Nov. 3, and during the whole of that month, except Saturdays, such bonds will have attached the coupons due Jan. 1 next, but in accordance with the terms of the deferred shares all warrants not exchanged for bonds during November will not be exchangeable at the London agency until May next. The warrants must be presented in amounts of \$1000 as bonds of this denomination only can be issued.

WHITE COAL.—The visit of the British Association to Canada, and the agreeable intercourse between British and Americans at the Montreal meeting, has taught the benighted Yankees something—that all members of scientific societies are not scientific men—and enabled them to estimate that the members of the British Association abled them to estimate that the members of the British Association consist of 20 per cent. scientific men, and 80 per cent. of "mere trippers." Wishing to make the trip as enjoyable as possible to the latter, it seems that a Pittsburg coalowner has played something beyond a practical joke upon both the British Association members who visited that city and the "dudes" of the American Association. When they visited the mine they must have felt themselves rather surprised and complimented to find that the exthetic proprietors of the mine had prepared for their reception by covering the coal walls with a fine coat of whitewash.

with a fine coat of whitewash.

OWEN VEAN AND TREGURTHA DOWNS MINES.—Captain Joseph Prisk, the well-known mining engineer, has at the instance of the owners visited this property, and issued a report to the directors, which we refer to in another column. The result of his careful inspection leads him to predict a bright future for the mine, which he says will shortly rank as one of the best tin mines in the country. He considered that the north lode was rich for tin, and by a further development, which could be carried on very inexpensively now the mine was drained, the value of the property might be doubled. The mine had been drained from the adit to the 50, shafts and levels cleared and secured, permanent pitwork fixed, and the main shaft deepened 18 fms. Everything underground is in full swing of working, and in a position to yield large quantities of mineral monthly. The pumps were strong, good, well proportioned, fixed with great care, and working well, sufficie to keep the mine drained to a great depth. At the stamps the dressing-floors, which are laid out with great ability, are near completion. This will enable you shortly to treat at least 25 tons of tin per month, and as soon as the frames for dressing the slimes are in working order your appliances here will be sufficient to dress 30 tons per month with ease. The new calciner will be ready to work in about two weeks from this date, and you will shortly be in a position to dress your tin on the mine. The general expenditure of the mine, especially at surface, will soon be greatly reduced. He further states that no abandoned mine that has been re-worked in the country ever presented such prospects, especially as the returns will shortly increase from 11 to 25 or 30 tons of tin per month. of tin per month.

DEVON FRIENDSHIP.—The aggregate value of the different bargains is 76l. 10s., and the cost of working them 34l. 3s.

OSCAR GOLD MINE.-We announced last week that the machinery would be set to work on Thursday (Oct. 16), and advices since received confirm this. Information as to the results of the crushings is expected in a short time, and will be eagerly looked for.

NEDENÆS.—A 300-ton heap of copper ore is about to be calcined. They have also been dressing a good deal of ore lately, and hope soon to have 200 tons ready for shipment.

BRATSBERG.—The Constance has arrived with a cargo of copper ore (computed 235 tons). This is sold at 10s. 3d. per unit on 20 per cent. produce. The Mary Owen brings over another cargo this month. The report from the managers received this week shows that the mines continue very productive. The aggregate value of the different points in operation is nearly 560L, while the four levels at Murchison's shaft are not yet resumed.

at Murchison's shaft are not yet resumed.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been:—Alliance and Dublis Consumers' Maximum 10 per Cent., 1914/6; Bombay (Limited), New, 5½; Brentford New Stock, 155 to 156; British Gas Light (Limited), 44; Buenos Ayres, New (Limited), 13½ to 13½; 615; ditto, 6 per cent. Debentures, 1998, 108½ to 108½; Commercial Consolidated, 259; Continental Union (Limited), 0riginal, 37½ to 33; ditto, 7 per cent. Preference, 31 to 31½; European, New, 16; ditto, New, 10¾; Gas Light and Coke, A. Ordinary, 224½ to 225½; ditto, O. D. and E. 10 per cent. Prefe., 239 ½; ditto, 4 per cent. Debenturess, 110½; Imperial Continental, 209 to 210½; Monte Video (Limited), 18 to 18½; Orlental (Limited), 23¾; South Metropolitan, A., 269½; ditto, B., 222 to 223½. Gas stocks steady. London companies still bought for investment. South Americans easier.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance Marine (Limited), 22½ to 22½; Atlas, 15; City of London Fire (Limited), 1½; commercial Union, 16½ to 16½; Employers' Liability Assurance Corporation (Limited), 1½; to 11½; Imperial Fire, 153; London, 51½ to 52½; London and Provincial Marine (Limited), 4½; Imperial Fire, 153; London, 51½ to 52½; London and Provincial Marine (Limited), 4½; to 17½; Imperial Fire, 153; London, 51½ to 52½; London and Provincial Marine (Limited), 4½; to 7. Insurance and Mersey Marine (Limited), 10½; Universal Marine, 61½; to 7. Insurance guite, little doing.

GOLD AND SILVER.—Messrs, PIXLEY and ABELL (Oct. 16) write:—

GOLD AND SILVER.—Messrs. PIXLEY and ABELL (Oct. 16) write: GOLD AND SILVER.—Messrs, PIXLEY and ABELL (Oct. 16) write:—Fine gold, owing to an increased demand for export, has advanced to 77s. 10d. per ounce, standard. The Bank has sold 45,00d. in sovereigns, for Egypt, and has received 25,000s. from Australia of the same coin. The Tongariro, from New Zealand, brought 26,000s. forestle, from the West Indies, brought 80,00s. forestle, from the West Indies, brought 80,00s. forestle, from the West Indies, brought 80,00s. forestle, indie has been entirely out of the market. The Elbe, from New York, brought 4500s.; Bliver, owing to lower Indian exchanges, relapsed to 503% ad., and since the issue of the Council Bills, India has been entirely out of the market. The Elbe, from New York, brought 4500s.; Olty of Berlin, from New York, brought 50,000s. from New York, brought 50,000s. from the West Indies, brought 500s.; Messelle, from the West Indies, brought 500s.; New York, brought 50,000s. The Subject of the Subject Schools. The Subject of the Subject Schools. The Subject Schools of the Subject Schools. Subject



MESSRS. PENNINGTON AND CO., SWORN BROKERS AND SHARE DEALERS, 13, MOORGATE STREET, LONDON, E.C. BUSINESS in all DESCRIPTIONS of STOCKS, MINING and other SHARES, ESTABLISHED 1869—BANKERS: ALLIANCE (Limited),

O R A C E J. T A Y L O 38, GREAT ST. HELEN'S, LONDON, E.O., STOCK, MINING, AND MISCELLANEOUS SHARE DEALER. AYLOB, ESTABLISHED 1874.
BANKERS CENTRAL BANK OF LONDON Limited).

C. PASS AND SON, BRISTOL

LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c., and DROSS or ORES containing COPPER, LEAD, AND ANTIMONY.

GEO. G. BLACKWELL, 26, CHAPEL STREET, LIVERPOOL, HANDLES
MANGANESE, BARYTES, SPARS, and ALL ORES on SALE or PURCHASE.

ASSAYING.

Mr. EDGAR JACKSON, (Assoc. R. S. M., F. I. C.)

RECEIVES PUPILS, and ASSAYS ALL KINDS OF ORES. 106, QUEEN VICTORIA STREET, LONDON, E.C.

JOHN LYSAGHT (LIMITED), BRISTOL SPELTER WORKS,

BUYERS OF ZINC ASHES, ZINC OXIDE, HARD SPELTER, CALAMINE, &c.

MESSRS. J. AND J. BANNER, BROKERS, LEITH OFFICES, LIVERPOOL.

BUYERS AND SELLERS OF MINES, MINERALS, &c. COMPANIES FORMED ON EQUITABLE TERMS.

JONES. A . MINING ENGINEER,

(ASTURIAS), SPAIN. GIJON

Mines inspected and reported on. Assays and valuations effected.

Has on hand offers of Mines of Copper, Calamine, Blende, Phosphat
of Lime, Tin, Lead, Iron, Manganese, and Manganiferous
Iron Ores.

MURRAY ASTON,

MINING AGENT,

CHRISTCHURCH, CANTERBURY, NEW ZEALAND. Mines and other properties in any part of Australasia inspected.

Reports by Government Geologists procured where required.

Terms very moderate, and expense of sending Engineer from England avoided.

ADDRESS CABLEGRAMS, "ASTON, CHRISTCHURCH.

RICHARD PROVIS,
STUD. INST. C.E.,
LAND AND MINE SURVEYOR, CAMBORNE, CORNWALL,

PREPARES MINING PLANS AND SECTIONS, AND UNDERTAKES GENERAL SURVEYS.

J. H. COLLINS, F.G.S., &c.,

CHEMICAL AND MINING ENGINEER, (Four years Chief Chemist and Metallurgist to the Rio Tinto Com-

pany, 13 years experience in Cornwall,
Author of numerous works on Mining and Mineralogy)
ADVISES ON GENERAL CHEMICAL AND MINING MATTERS, AND ESPECIALLY ON THE TREATMENT OF MIXED AND LOW-CLASS ORES.

ADDRESS-54, COLEMAN STREET, LONDON, E.C.

PATENTS FOR INVENTIONS.

(British, Foreign, and Colonial).

Apply to Mr. ERNEST DE PASS, Fel. Inst.,
Patent Agents, Assoc. Soc. Engineers,
68, FLEET STREET, LONDON. Pamphlet of information Gratis, and post free on application.

Twenty years' experience.

ESTABLISHED 1866.-THIRTEEN YEARS IN CORNWALL. SAMUEL JAMES, STOCK BROKER AND MINING SHARE DEALER, 14, ANGEL COURT, LONDON, E.O. Member of the Redruth Mining Exchange.

Those who wish to buy or sell any mining shares should consult Mr. James, Mr. J. devotes his entire attention to home and foreign mines, and places his special information at the disposal of his clients. That mining offers undoubted advantages for quick returns no one can deny. Look at the enormous sums of money paid in dividends by home and foreign mines. A large number of wealthy families owe their present proud positions to adventuring in LEGITIMATE MINES. With a better price for metals many of the smaller priced shares would immediately advance some hundreds per cent.

TREVAUNANCE also POLBERRO SHARES SHOULD BE BOUGHT AT ONCE,

TREVAUNANCE also POLIBERRO SHARES SHOULD BE BOUGHT AT CAUBIThere are many mines worth attention, as proceedings of recent share
holders' meetings prove beyond doubt. During the last 40 years there has no
such opportunity presented itself as the present for investment in British mines.
Metals are certain to advance. In well-informed circles no doubt is entertained
on this point. Buyers must not further delay orders.
See Selected List published by S. JAMES, 14, Angel-court, London, E.C.

10 Great Laxey, £91/a.
20 Gunnislake (Olit.) 8s.
5 Great Holway, 15a.
100 Home Mines Trust,
23s.
50 Killifieth, 7s. 6d.
50 Kit Hill Gt. Cons., 2s.
100 Kit Hill Gt. Cons., 2s.
100 Mounts Bay, 2s. 6d.
120 Mounts Bay, 2s. 6d.
120 New Caradon, 6d.
100 Old Gunnislake, 2s. 6
100 Old Gunnislake, 2s. 6
100 Old Gunnislake, 2s. 6
100 Ports United, 37s 6
100 Clotol Shepherds, 13s. 9
100 Ports United, 37s 6
100 Clotol Shepherds, 13s. 9
100 Ports United, 37s 6
100 Ports United, 37s 6
100 Ports United, 37s 6
100 Ports New, 6s. 9d.
118 Richmond, 281 18. 3d.
100 Rew Caradon, 6d.
100 Old Gunnislake, 2s. 6
100 Ports New, 6s. 9d.
100 Ports Phillip, 2s. 3d.
100 Rew Caradon, 6d.
100 Old Gunnislake, 2s. 6
100 Ports Phillip, 2s. 3d.
100 Rew Caradon, 6d.
100 Old Gunnislake, 2s. 6
100 Ports New, 6s. 9d.
118 Richmond, 281 18. 3d.
118 Richmond, 281 18. 3d.
125 Rocopilla, 32 18. 3d.
125 Rocopilla, 32.
126 Rocopilla, 32.
127 Rocopilla, 32.
128 Rocopilla, 32.
129 Rocopilla, 32.
120 Rocopilla, 33.
120 Rocopilla, 34.

15 Roman Gravels, 578 6 100 Glenrock, 38.

**** S. James can buy or sell any of the above shares. Correspondence invited. Trustees, executors, and others will find their duties considerably lightened by submitting schedule of shares held to Mr. James, who will return the same by next post with market values attached.

Orders by letter or telegram promptly attended to. Speculative accounts not opened on any terms whatever. Send for selected list of Mines. CLOSING PRIOES issued every Tuesday and Friday.

TELEPHONE NO. 212.

BANKERS: IMPERIAL BANK, Lothbury, E.C.

MINING OFFICES, 1, ST. MICHAEL'S ALLEY, CORNHILL LONDON, E.C.

ESTABLISHED UPWARDS OF FORTY YEARS.

MESSRS. WATSON BROTHERS, in referring to their public Circular in the Mining Journal, would also observe that they BUY and SELL SHARES at the nett market prices of the day in all well-established and respectable Mining Companies; also, in English and Foreign Funds' Bailway Stocks, &c.

Oct

is unchar The stead large sto is become ports are feature is week, an lighted as number and 471 Thus

Furnaces
Iron in st
Shipment
week
Do. since
Price of
Purnaces
Middleabi

market, exact ca

to say v seems (Christm operation things)

the We

manuf: the Bo but for of coal

tion of the uti ducts.

glecte ployed comes

with 8

an im

DENT'S WATCHES

CLOCKS

NEW ILLUSTRATED CATALOGUE of High-Class Watches and Clocks at Reduced Prices sent Post Free on application to E. DENT & CO., Hakers to the Auern, 61, Strand, London, W.C.; or 35, Royal Exchange, E.C.

COAL MINES REGULATION ACT, 1872.

EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY.

DISTRICT UNDER THE CHARGE OF THOMAS EVANS, Esq., H.M. INSPECTOR OF MINES.

NOTICE IS HEREBY GIVEN, that an EXAMINATION for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 3'th and 31st days of October, 1884, and CANDIDATES INTENDING TO PRESENT THEMSELVES AT SUCH EXAMINATION must, on or before the 29th day of October, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars can be obtained.

rs can be obtained.

By order of the Board,

WILLIAM SAUNDERS, Secretary. The Arcade, Derby.

N.B.—Persons who do not reside within the District are equally eligible for amination with those who do.

COAL MINES REGULATION ACT, 1872. EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY. DISTRICT UNDER THE CHARGE OF WILLIAM ALEXANDER, Esq. H.M. INSPECTOR OF MINES.

NOTICE IS HEREBY GIVEN, that an EXAMINATION for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 25th and 25th days of November, 1334, and CANDIDATES INTENDING TO PRESENT THEMSELVES AT SUCH EXAMINATION must, on or before the 15th day of November, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars can be obtained.

By order of the Board,

35, 5t. Vincent-street, Glasgow, 10th October, 1334.

N.B.—Persons who do not reside within the District are equally eligible for examination with those who do.

INTERNATIONAL INVENTIONS EXHIBITION LONDON, 1885.

DIVISION I.—INVENTIONS. DIVISION II.—MUSIC.
PATRON.
HER MAJESTY THE QUEEN.

H.R.H. The PRINCE OF WALES, K.G.

Applications to exhibit must be made on printed forms, which will be supplied on application to the Secretary, International Inventions Exhibition, South Kensington, S.W.

These must be filled up and returned on or before the 1st Nov.,

THE YORKSHIRE COLLEGE, LEEDS.

COAL MINING CLASSES
By Instructor ARNOLD LUPTON, M.Inst.C.E., F.G.S.

introductory Lecture on "Mining in North America" will be delivered in ilosophical Hall on Monday, Oct. 20th, at Five P.M. Admission free. ourrow's Second Year Course will begin at the Yorkshire College on the tober at 5 30 P.M. ectus may be had post free from the Secretary. Mr. LUPTO 27th October Prospecture

Prospectus may be had post free from the Secretary.

R I O T I N T O C O M P A N Y (LIMITED).

Notice is hereby given that the SHARE TRANSFER BOOKS of the company will be CLOSED from WEDNESDAY, the 22nd, to FRIDAY, the 31st inst., both days inclusive, for the preparation of the INTERIM DIVIDEND which will be PAID on the 1st November.

Holders of Share Warrants to Bearer are informed that they will receive payment of the said Interim Dividend at the rate of 10s. per share, free of income tax, on and after Saturday, the 1st November, 1884, on presentation of Coupon No. 12, either at the company's office in London, or at the Société Générale, rue de Frovence, 55, Paris, or at the Deutsche Nationalbank in Bremen.

Coupons for payment in London must be left four clear days previously for examination, and may be deposited on or after the 20th instant.

By Order, R. J. FENNESSY, Secretary.

Offices of the company, 38, St. Swithin's-lane, E.C., 15th October, 1834.

THE SCOTTISH AUSTRALIAN MINING COMPANY Notice is hereby given, that the HALP-YEARLY GENERAL MEETING of the shareholders of the Soottish Australian Mining Company (Limited), will be HELD at the City Terminus Hotel, Cannon-street, London, on FRIDAY, the 24th October instant, at Twelve o'clock at noon precisely, to receive the directors' report and accounts, declare a dividend, and transact the other usual

business.

The Share Transfer Books will be closed from Thursday, the 16th instant, until Friday, the 24th instant, both days inclusive.

By order of the Directors.

C. GRAINGER, Secretary.

50, Old Broad-street, London, 14th October, 1834.

NITED MEXICAN MINING COMPANY

(LIMITED).

Notice is hereby given, that the ORDINARY HALF-YEARLY GENERAL

MEETING of proprietors will be HeLD at the Guildhall Coffee House, Greshamstreet, London, E.C., on WEDNESDAY, the 5th day of November next, at One
o'clock precisely, for the purpose of transacting the business of the company.

The Transfer Books will be closed on the alternoon of the 25th October, and
re-opened on the day succeeding the meeting.

By order of the Board,

W. M. BROWNE, Secretary.

Offices: 3, Great Winchester-street Buildings, London, E.C.,

17th October, 1884.

NOW PUBLISHING, PRICE 30s., THE THIRD EDITION OF KELLY'S DIRECTORY OF THE MERCHANTS,
MANUFACTURERS, AND SHIPPERS OF THE
UNITED KINGDOM:
Being a Guide to the Export and Import Shipping, and Manufacturing
Industries of the United Kingdom, with the Colonies and Foreign Countries.

Minister in this country, Consuls, Vice-Consuls, &c., at the various ports and places in this country; the principal bankers, the merchants, commission merchants, buyers of English goods, and the manufacturers, &c., at the principal towns of the various goods imported; the various ports in each country; also the ports in this country whence shipments are made; tariffs, &c., &c.; a tabular statement showing the exports from this country during the last three years; a list of the merchants and shippers in the various British towns; list of steamers and other ressels salling from the ports; also a list of the various manufactures that are exported from this country.

The second division comprises an alphabetical list of the exporters from this country.

and other vescinates and shippers in the various British towns; list of steamers and other vescils asiling from the ports; also a list of the various manufactures that are exported from this country.

The second division comprises an alphabetical list of the exporters from this country, staling the class of goods exported by them.

The third division of the work embraces the names and addresses of the actual manufacturers, or manufacturers agents, of the articles exported, describing as clearly as possible the specialities of each manufacturer.

"It is almost exhaustive as a guide to the shirping and manufacturing industries, both export and import, of Great Britain and Ireland."—The Tunes, Sept 20th, 1824.

"Merchants and manufacturers of all kinds will find the Directory a valuable guide, whether their interests are concerned in exports or imports."—Duily Chronicle Sept. 12th, 1834.

"It suounds in information of the kind which merchants, manufacturers, and exporters are constantly in need of. Its scope, however, is not confined to the classes who in this country have business with the colonies and foreign parts; but includes also the principal merchants abroad, as that the book becomes a tolerabily complete guide to the import and export industries of all countries with which Great Britain has any mercantile relation, and vice veras."—Duily News, Sept. 17th, 1834.

"In collecting the names of foreign and colonial firms—a task of considerable difficulty, as will be understood—Mesers, Kelly have had the assistance of the British Consula, many of whom have given personal testimony to the important service this Directory failful in commercial circles abroad."—Exception Mes. Sept. 18th, 1834.

"Landon: Kallet and Co., Publishing Office, 51, Great Queen street, W.C.

LET and Co., Publishing Office, 51, Great Queen-sirest, W.C.

Notices to Correspondents.

BELF COPPER COMPANY—ERRATA.—With reference to the report of this company's meeting in last week's Missing Journal, Mr. E. P. Rathbone writes that he is reported to have represented the burrows to be worth 1 per cent. of copper. This is not the case. A portion of the burrows may be worth 1 per cent. of copper in parts; but even where this is the case it is so mixel up with unproductive trap rock that it would be impossible to work it to a profit. Secondly, in referring to the value of the property, he wishes to convey—shooting the liabilities outstanding at the present moment were not paid off, an execution might be levied on the mines by any creditor in the Sates, and the property sold for what it might fetch, in which case the shareholders might not get more than 6d, in 14, if so much; that as soon as the liabilities are liquidated the company will be in a position to sell the property should they wish to do so, in which case they would not sell their original investment; and that if between 20,0004, and 30,0004 were subscribed for debentures they would not only get back the whole of their money, but also a good interest upon it.

STRONTIA—Can any reader of the Mining Journal inform me where a market.

STRONTIA.—Can any reader of the Mining Journal inform me where a market can be obtained for strontis, either in its raw state or ground, as there are large deposits in my neighbourhood.—INQUIRER.

Marge deposits in my neighbourhood.—INQUESES.
VICTORIA (VENEZUELA) GOLD —SCHOLL'S STAMPS.—The widow of the late
Mr. Scholl writes that as Mr. Scholl never sold this company a stamp or received royalty upon any stamp used by the company there must, she feels
sure, be a great mistake somewhere. The Scholl stamp is working well and
giving great satisfaction in St. Austell, Cornwall, so that the Venezuelan
machine which failed must have been some other invention.

MEDIAN KINGSTON.—Would any correspondent give me, if possible, some informa-tion in the Journal as to what has become of the Indian Kingston and Sand-hurst 60ld Mining Company? It appeared once to be one of the most promising companies. When it was promoted I took 50 shares, and for which I paid 50l. Perhaps some of the readers of the Mining Journal could give desired information.—U. S.

desired information.—U. S.,

Received,—'C. J. Q." (Philadelphia)—"B. A. A."—"T. E. C."—"A. P." (Chipping Sodbury): Inserted—'R. F. M." (Cheltenham)—"E. A. H."—"G. H. P."

—'W. B. P."—"J. C. B.": You will find several good rock-drills advertised in the Journal. Your engineer will be the best judge in making the selection. The mere fact of a given quantity of work having been accomplished in a given time by a given invention is no criterion of economic value. In tunnelling it may pay to break up a dozen machines a week to keep up speed of driving, but in mining the case would be different. It would be preferable to visit some mine where drills are in use—"D. K. A."—"H. D."—"R. M."—"H. F.": II you are not satisfied with the secretary's version of the reports you should get it arranged at a public meeting that they shall be published as received.—

"J. G." (Manchester): Letter forwarded.

THE MINING JOURNAL.

Bailway and Commercial Gazette.

LONDON, OCTOBER 18, 1884.

THE INVESTMENT OF CAPITAL.

We are rapidly approaching the period of the year when speculation becomes rife. The law requires that during the month of November notices shall be inserted in the metropolitan and provincial press of the various schemes which seek public approval and Parliamentary sanction. This, then, is the time when stockbrokers and financial agents sow the seed from which they hope, and generally realise, rich golden harvests. It is necessary, on the one hand, that this should be done, for without it there would be no incentive to commercial activity, and business life and trade would become inert and stagnant. On the other hand, sound commercial judgment and pradence should deprecate chimerical schemes and cohemeral inert and stagnant. On the other hand, sound commercial judgment and prudence should deprecate chimerical schemes and ephemeral projects, and capitalists ere they invest should carefully examine the many schemes which are launched for public approval and support. Our principal commercial undertakings have now become so enormous, and such gigantic projects have been carried out and others still awaiting execution, that the great business affairs of the nation could scarcely be now conducted without Joint-stock Companies; and Limited Liability Companies materially help forward many of the great enterprises which are carried out. Some 25 years have now elapsed since the Board of Trade issued official yearly returns of the number and the share capital of joint-stock companies, and these great enterprises which are carried out. Some 20 years have now elapsed since the Board of Trade issued official yearly returns of the number and the share capital of joint-stock companies, and these returns give much interesting and reliable history of the industrial and financial condition of the United Kingdom since that period. These returns show that the trade of the kingdom fluctuates very considerably—there is the ebb and the flow of the commercial trade, and, generally speaking, the more prosperous the commercial flow the more disastrous and ruinous the following ebb. For instance, in the year 1864 the number of joint-stock companies registered was 997, the share capital of which was the largest amount subscribed in any one year—237,237,000., or nearly 24,000. share capital per company. This is a prodigious amount certainly, but of the number of companies successfully floated or the amount of capital which bore good fruit no official record seems to have been kept. But in 1866 the crash came, and there was a consequent loss of confidence in such companies. The effect was that in the following year only 479 companies, with a share capital of only 31,500,000l. was registered. Since that time, however, there has been a gradual revival in the trade and industry of the country, and consequently in the number

companies, with a snare capital or only 31,500,000t. was registered. Since that time, however, there has been a gradual revival in the trade and industry of the country, and consequently in the number of joint-stock companies floated and the share capital invested, until in the year 1833 there were 1648 companies registered, with a share capital of 167,750,000t.; but of these the Registrar affixes against the names of no less than 428 of them the words "wound-up," not in operation," or "no information."

There can be no doubt that these joint-stock companies have swallowed up hundreds of thousands of pounds which should have been applied to the legitimate expansion of trade or the carrying out of well-considered schemes for the development of commerce. In many instances the companies have proved remunerative mainly to the promoters, financial agents, lawyers, and the vendors of property. The shareholders' interests have been only of secondary consideration, and thousands of once well-to-do tradesmen have been ruined by a too implicit confidence reposed in schemes which are launched with such a flourish of trumpets. Many attempts have been made by Parliament to protect shareholders, and to punish the unscrupulous promoters and financial agents. The Act of 1867 was a decided step in this direction, and it proved a valuable practical check to much of the reckless speculation which was then rife. That Act made it fraudulent not to publish in the prospectus the agreements and expressive and explaints and explaints. Being a Guide to the Export and Import Shipping, and Manufacturing Industries of the United Kingdom, with the Colonies and Foreign Countries.

This work gives a vast amount of information respecting the business carried on between the United Kingdom and the Colonies and Foreign countries, showing the description of goods and the amount thereof exported to each Colony or country abroad, the British ports whence shipments are made, the merchants, factors, and shippers at the various ports and towns in England, the manufacturers of the principal goods exported, and the merchants and others abroad who has an anounts thereof imported from abroad into this country, with the names of the warious goods imported.

The work is divided into three principal divisions, the first of which comprises the various foreign countries and British possessions throughout the world to which British manufactures are exported.

Under each of these is given, first—a statistical account of the country; the British and other Consuls; the name of the financial position; business relations with this country, with, in the case of foreign states, the manufacturers are exported.

Under each of these is given, first—a statistical account of the country; the British and other Consuls; the name of the financial position; business relations with this country, with, in the case of foreign states, the manufacturers are exported.

The work is divided into three principal divisions, the first of which country is the principal divisions, the first of which country is the principal divisions, the first of which country is also the various ports and other Consuls; the name of the financial position; business relations with this country; the principal divisions, the first of which country is also the various ports and other Consuls; the name of the financial position; business relations with this country, with, in the case of foreign states, the manufacturers at the various ports and other Consuls; the name of the financial position; business relations wit

whist we would carnestly endeavour to prevent reckless specula-tion, and would discountenance the launching of schemes of ques-tionable utility, there are many projects still on the tapia which will tend to the development of trade and commerce, and are, conse-quently, legitimate channels for the investment of capital. There are many of our colliery districts through which short connecting links would open up large maiden mineral districts or considerably augment the yield of already-established concerns. There are also augment the yield of already-established concerns. There are also several projects involving very large expenditure of money which have been promoted with the view of providing water-ways, and thus breaking up the monopoly of railway carriage of minerals and goods. In Wales there are large dock enterprises to be carried out, and fresh lines to be made leading up to the very heart of the great Rhondda coal valley. In Ireland there are many districts rion in mineral deposits a waiting Regular harveries and capital for their and fresh lines to be made tearing up to the very many districts rich in mineral deposits awaiting English enterprise and capital for their profitable development and working. In our colonies, our Indian empire, and our dependencies scores of fresh lines, opening up immense tracts of land, and involving millions of pounds, all appeal to English capitalists for execution There is unquestionably a plethora of money in England awaiting investment, and the fact that

so much lies unproductive tends to speculation without full enquive being made. As a rule, home and colonial investments, even when not altogether successful, are not so utterly ruinous as the bait held out of 15 and 20 per cent. in gold, silver, and diamond mine in foreign countries. The outcry which is usually made at this season of the year about the floating of bogus companies and redless speculation arises to a very great extent from the too great has to become rich on the part of speculators and capitalists, and from the fact that those who have a little money at disposal will theaselves invest rather than entrust their commission to respectable old, established brokers or financial agents. A few pounds paid in the selves invest rather than entrust their commission to respectable oldestablished brokers or financial agents. A few pounds paid in the shape of commission for sound advice, based upon experience and investigation, are always well laid out. There are yet many legitimate outlays for English capital and enterprise—many schemes which will expand our trade and commerce in the parent county and the colonies; and if capitalists and speculators would avoid be allurements of reckless adventures they will exercise more discribing the commission to a respectable firm of stockbrokers or agents.

DEVELOPMENT OF THE MINERAL DEPOSITS OF LINCOLNSHIRE.

DEVELOPMENT OF THE MINERAL DEPOSITS OF LINCOLNSHIRE.

North Lincolnshire, with its vast deposits of ironstone scarely second in extent to Cleveland, and in all probability with a valuable field of coal as yet undisturbed, is anything but well provided with railways; indeed, there is only one line with a few branches to and from Doncaster and Grimsby daily that traverse the ironstone field or goes near to the works. Last year an effort was made to give access, by means of a line of railway known as the Goole, Epword, and Owston line, which would connect the former with Missingham on the Doncaster and Gainsborough Railway. The project, however, was successfully opposed by other companies, one of the grounds being that a Bill had been passed for the formation of a tram line over a considerable portion of the same district. It now appears that the tram line is not to be proceeded with, and as the Bill will be again brought forward in the session of 1885, it is said there is every reason to believe that it will be carried. The line will be about 20 miles in length, and will open out some new industries in the localities through which it passes. At Epworth there is plenty of gypsum, the working of which will pay well, and in what is known as the Marsh Land near Goole, good ironstone has been met with quite close to the surface, only requiring the necessary facilities for transit to be opened out. The land itself in its present state is by no means valuable, as was the case with that in the Frodingham district before the ironstone was discovered and worked, but it would be very different were it connected with a railway.

Our ablest geologists, too, are agreed that there is plenty of coal in Lincolnshire under the magnesian linestone and the new ret sandstone, or newer formation. What is known as the great Midland coal field, which has its southern boundary at Nottingham, and its northern one about Leeds, in going along by way of Rotherham and Barnsley, dips to the east at a greater angle than the limestone itself, on

itself, on which the lower red sandstone rests unconformably on the coal measures. The limestone has not been gone through in the South Yorkshire district as yet, the mere fringe of it having been touched at the sinking at Denaby Main Colliery. The coal measures, however, branch out to Doncaster, the strata rising to the east, so that the coal peculiar to South Yorkshire will ultimately be found to terminate under the lias of Lincolnshire, although it has not yet been bored to. The boring at Drax, on the estate of Lord Beaumony, however, shows that the coal exists there, as it will, in all probability, on the course of the proposed line of railway, where the geological formation is the same. The new line of railway cannot fail, therefore, to aid in farther developing the already known valuable deposits of ironstone in Lincolnshire, and hastening the opening out of the beds of coal that are in the county. Lincolshire will not then be dependent upon any other district for smelting material, as it will have the iron ore coal, and limestone on the spot.

DRILLING MACHINES IN COAL MINES.

Inventors have long complained of the little interest taken by mineowners in the coal cutting machines they have patented for doing away with the most exhausting and dangerous parts of the miners' work, reducing the cost of production, and greatly lessening the loss of life. In some places the introduction of drilling machines by the workmen themselves, and at their own cost, has received marked discouragement, for what reason it is difficult to guess. Drilling machines bring the coal down in larger pieces than is posible with the pick, and make a great deal less slack. In the North of France and in Belgium drills are used in the coal mines both by hand and power, the best known being the Dupous and the France hand and power, the best known being the DUBOIS and the FRAN-COIS, whilst the DUNN and FERROUX are also tolerably well-known, the latter being considered the best for the drilling of horizontal holes. English drills, however, are not to be excelled, and they are

holes. English drills, however, are not to be excelled, and they are made suitable for almost every mining purpose, and we should like to see them more generally used. With them miners would do a great deal more work than they do with their ordinary tools; and if the men were to introduce them we most assuredly think they are entitled to any advantage that is to be gained by their so doing. But this is not the opinion of some persons, as has just been shown in the case of a number of men employed at the Barrington Colliery. Some time since these men went to the expense of getting drilling machines, and then were able to earn more than was the average of the county, and on an appeal being made to the joint-committee the latter decided on a reduction of 2d. per ton. The drills were then brought out, when the earnings came below the standard. The question was then left to be decided by a gentleman acting as umpire, and he decided that the deduction should only be 1d. per ton. The drills were consequently again taken into the mine, but here there was another more serious interference, for the men were told that they could not have their drills sharpened at the colliery, upon which most of them gave the usual fortnight's notice to leave. This certainly appears to be a harsh proceeding towards the men who had provided themselves with drilling machines to earn more money with a less expenditure of labour than previously. It is hoped that a saliprovined themselves with drilling machines to earn more money what a less expenditure of labour than previously. It is hoped that astifactory arrangement will yet be come to between the manager of the mine and the workmen. Owners of mines would be acting in their own interest were they to encourage in every way they can the introduction of machinery underground by their workmen. The time is not far off when machinery in the underground working of mines will be the rule, and owners in encouraging the men to use whatever will be the rule, and owners in encouraging the men to use whatever machines or appliances they can calculated to lessen their labour and increase their wages will make them more tolerant when ma-chines are introduced for the cutting of coal, as well as for other mining purp

COLLIERS' WAGKS IN STAFFORDSHIRE-END OF THE STRIKE. our Staffordshire reports have shown there has been a distinct tendency for some weeks by a numerous section of strike hands to resume work if only they could do so without being conspicaces in their disregard of the Central Strike Committee, who continue to advise active resistance. Consequently, when on Monday and advise active resistance. Consequently, when on Monday and Tuesday colliery owners of prominence started the engines at numerous pits there were plenty of hands ready to go down. As many as could have work provided for them were set on, and the rest only wait the opportunity to resume. Even the 350 hands at the Sandwell Park Colliery, Westbromwich, are going back, while the claim which they have been urging in the County Court for wages in liou of a full fortnight's notice is to be abandoned. The Sandwell Park Company, however, resolutely refuse to again employ S. H. Whitehouse, a collier who has done much to keep the strike going throughout the more than 15 weeks of its existence. But at Sandwell, as at other leading collieries, notice is on Oct. 18 to be given by the men for a rise in wages a fortnight hence to the extent of the drop at which the men have now resumed—4d. in the Thick, and 2d. per day or stint in the Thin coal. With the iron trade in its present condition it is scarcely likely that the notice will have any effect upon the masters. throughout the more than 15 weeks of its existence.

884

enquiry ren when the baits at this at this at this at the bait and from able old in the nee and nee and ay legitischemes

OF

is by

coal

the

SCOTCH PIG-IRON WARRANT MARKET.

... 41/7½, 41/8½
Thursday, Oct. 16.
... 41/8½, 41/9½
3. 1882. 1881.
½ ... 50/11 ... 51/6
... 113 ... 105
104 ... £22,448 ... 599,900 8, 41/10, 41/9 ... 4 1884. 1883. 41/8 ... 46/4½ ... 94 ... 94 ... 582,407 ... 589,104 ... 1/1%: 3/9

Pies of Scotch Warrants, Oct. 13...

Puraces in blast in Scotland do...

Piraces in blast in Scotland do...

Pies of Scotch pig-iron for a sea of the sea 11,661 ... 11,787 ... 14,199 ... 8,708 442,492 ... 517,424 ... 36/7½ ... 39/ ... 93 ... 118 ... 511,843 ... 452,953 44/9 ... 42/6 120 ... 113 4,440 ... 6,995 ... 6,180 ... 9,123 Oct. 10..... Do. do. since beginning of year ... 203,838 ... 210,465 ... 187,747 ... 241,509

REPORT FROM CORNWALL.

REPORT FROM CORNWALL.

Oct. 16.—Speculation on the future seems out of the question now, seing how often hope has been disappointed; but so far as forecasts are ventured, the general expectation seems to be improvement rather than further decline. Nothing is doing in the share market, save in a few leading mines, and they are dull. Where the exact cause of the present condition of affairs lies it would be hard to say with any real approach to definite accuracy; but this at least sems certain, that if there is no improvement between now and Christmas, we may expect some rather serious changes in mining operations, for there is less recuperative power at this moment, all image considered, than probably ever before. The number of hands out of employ is steadily increasing.

A step has been taken in the utilisation of a mineral substance of the West that has long lain almost wholly waste that may have im-

out of employ is steadily increasing.

A step has been taken in the utilisation of a mineral substance of the West that has long lain, almost wholly waste that may have important consequences. It is somewhat over a century since that the lignites of Bovey Neathfield, in Devon, were turned to account in connection with the more easily treated clay of that locality in the manufacture of pottery. For a long time after the establishment of the Bovey pottery the lignite seems to have been the chief fuel used; but for many years now it has been practically abandoned in favour of coal, though occasionally used in the drying process. The introduction of coal, as well as the improved kilns, was one of the factors in the utilisation of the more refractory clay of the district, neglected until recently, but which now play so important a part in its products. The disuse of the lignite in the pottery, and the fact that it a very ill adapted for domestic purposes, has led to its being neglected as a commercial product. Now, however, it is being employed in the manufacture of what is called patent carbon, which comes into competition with animal and wood charcoal and similar substances, and which seems likely to have an important future before it. For decolorisation it has been found equal in power to animal charcoal, and it is said to be quite as efficient and economical in use in sugar refining, while, of course, its first cost is very much similar substances, and which seems likely to have an important future before it material in the field, and trials have shown that in dealing with sewage it removes about 40 per cent. more of the solids than animal charcoal, taking out quite as much of the organic matter, and just twice as much of the mineral. With claims like these it is quite possible, therefore, that the Bovey lignite may come to play aimportant part in the economical relations of social everyday life in connection with the important questions of sanitation; and that this hitherto all but waste material may be made of

REPORT FROM DERBYSHIRE AND YORKSHIRE.

BEPORT FROM DERBYSHIRE AND YORKSHIRE.

Oct. 16.—No material change has taken place in the condition of the Iron Trade of Derbyshire since last notice; but it may be said that the workmen continue to be fairly employed all round. The make of pig-iron has kept up to the average, and the demand has, perhaps, slightly improved of late, for more has gone away by railway into distant districts, where it is used for mill purposes. Prices, it would also appear, are rather better than they were, having for a cossiderable time been anything but remunerative, although, in this respect, the makers were no worse off than those in other localities. The local consumption has kept up well, which is saying a good deal, seeing that at this time of year there is generally a falling-off in the production of certain iron specialities, for which several of the works are noted. The foundries, however, still continue to work favourably—at least, the leading ones, employing large numbers of hands and engaged in turning out heavy castings, such as pipes, pillars, cylinders, &c. Lighter material, however, has continued comparatively quiet; but in some kinds of mining tools, for which, at least, one establishment has a very high reputation, a fair amount of business has been done. In merchant iron also trade has become rather better, but the whole of the mills are not doing so much as they could. Fine malleable light castings are heavy received.

many other places. Gas coal has also gone off better, but this in no way affects the price of it, which is the same during the whole of the year. Steam coal has undergone but little change of late, for not much of it finds its way to any of of it finds its way to any of our seaports for exportation owing to the great distance, and the fact that from most of the collieries there is no one relieve. one railway that goes direct to any port of importance. deal, however, is taken by several of the railway companies good deal b locomotive and other purposes, but the consumption at the present time by them is not so large as at some other times. The furnaces also are taking a full average, so that the two sources named are those in which many colliery owners have mainly to depend for the disposal of their steam coal. Some few contracts for delivery in the Metropolis are held, but they are not of much consequence, whilst the prices obtained are not such as to make them made much consequence.

the prices obtained are not such as to make them much sought after. Small coal is still in but moderate request on the part of manufacturers, especially those in the Lancashire cotton districts, who are able to purchase it at other places on better terms, owing to the distance and the railway rate being so much less.

The improvement in some branches of the Sheffield trade reported in last week's notice has in no way declined, still in some departments, quietness is the rule. There is a steady production of both Bessemer and crucible steel, a good deal of the former being in billets, some heavy forgings being produced from it, and the cast materials as well as rails are being produced to a moderate extent,

as our makers are not in a position to compete for foreign orders, owing to the heavy charge by the railway companies for conveyance to any of our seaports. A good deal of crucible steel is also being used for railways and other wheels, and more of some special qualities are now required for the best qualities of cutlery, fine instruments, and small tools. Some fair orders have come to hand for table and other knives, especially for the best qualities, notwithstanding the high price of both ivory and pearl. More is also being done in secondary qualities of both table and pocket knives, and some improvement has also to be noticed with respect to some kinds of machine knives and large blades used abroad for field and other purposes. In edge tools some of the makers are able to find their hands full employment which has not been the case previously. In sheep-shears, too, work is tolerably plentiful, but ordinary scissors are still in comparatively moderate request, the makers suffering from the competition on the part of the German manufacturers, who are by no means particular as to the names or marks they use, and who produce a cheaper but, of course, inferior article, but tolerably well finished. The mills engaged in ordinary ship and boiler plates are not doing so much, the demand being still but limited. On the other hand, however, no decline has taken place in the business doing in the composite iron and steel-plates, the two companies having the monopoly turning out large quantities of them. At the engine-works a moderate trade continues to be the rule, but in some kinds of small machines there is a fair turn-out for the time of year, seeing that the demand for them is not likely to be of much consequence until next spring. At the railway wagon works the men continue to be well employed, as they have been during the greater part of the year. In the silver-plated and white metal branches a decided change has taken place for the better, as is usually the case towards the close of the year, when goods for Chris

REPORT FROM LANCASHIRE.

REPORT FROM LANCASHIRE.

Oct. 16.—There is only a moderate business doing generally in the Coal Trade of this district and colliery proprietors are not more than about holding their own so far as prices are concerned. In house-fire coals there is a fairly steady trade doing, but there is no push of orders and some of the collieries are still on short time. The leading colliery proprietors in the Manchester district are very firm at the full October rates, and in the West Lancashire districts an advance of 6d. on the September rates is being maintained on the better classes of round coal, the average prices for which at the pit's mouth are about 9s. 6d. for best Wigan Arley, 7s. 6d. for second qualities and Pemberton Four-feet, and 6s. 6d. for common house-fire coals. Common round coals for steam and forge purposes meet with only a slow sale, and in some cases prices are, if anything, rather easier; the lower qualities of steam coal being obtainable at as low as 5s 6d. per ton at the pit's mouth, with 6s. about the average figure for good ordinary qualities. Supplies of engine classes of fuel continue in excess of requirements, and although the leading Manchester coalowners still hold to the advance they put on at the commencement of the month, generally both burgy and slack are being offered at quite as low prices as ever, and at the pit's mouth can be bought at about 4s. 6d. to 5s. for burgy, 4s. for good slack, and about 3s. per ton for the common sorts.

In the Shipping Trade business has rather quietened down, and

at about 48. Oct. to 38. for burgy, 48. for good stack, and about 38. per ton for the common sorts.

In the Shipping Trade business has rather quietened down, and steam coal delivered at the High Level, Liverpool, or the Garston Docks, can be got at about 7s. 3d. to 7s. 6d. per ton.

As a natural consequence of the recent upward movement in prices the men in the West Lancashire districts have commenced an agitation for an edward of the recent upward movement in prices the men in the West Lancashire districts have commenced an agi-

the men in the West Lancashire districts have commenced an agitation for an advance of wages.

In the Iron Trade, although here and there moderately good orders have been secured since the Quarterly Meetings, there has been no general acquisition of any weight of new business to bring about any improved condition of the market. Where makers have got orders there is a tendency to a little more firmness in price, but for actual transactions of any importance the minimum rates continue the basis, and any attempted advance only tends to check further sales. For delivery equal to Manchester quotations for local brands of pig-iron remain firm at 41s. to 42s. less 2½; for Lincolnshire, 42s. 6d. to 43s. 6d less 2½ has been got, where makers have been willing to book forward contracts, but for prompt delivery 6d. under these figures is taken. Derbyshire is quoted at 44s. to 45s. less 2½; North Country iron for inland sale is rather easier, and good foundry Middlesborough is to be bought at about 44s. 4d. net cash delivered equal to Manchester. In Scotch iron the tendency has also, if anything, been in the direction of weakness.

Hematities continue very bad to sell, and to secure orders extremely low prices are taken.

Hematites continue very bad to sell, and to secure orders extremely low prices are taken.

Rather more business is reported in the Finished Iron Trade, and some of the leading makers who have booked a moderate weight of orders recently have put up their quotations to 5l. 15s. for good qualities of bars delivered into this district, but 5l. 12s. 6d. remains the average figure that is actually being taken, and there are some local brands still to be got at 5l. 10s. per ton.

In the engineering trades business continues to quieten down, and in most branches the weight of new work coming forward is only very small.

very small.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Oct. 16.—Ironworks fuel is this week pressed upon the market and prices are a shade easier. It will be a week or two, however, before the full effect of the resumption of work by the colliers is experienced by the market. The strike being over the coal trade as a whole wears a more healthy appearance than for a long time past. Ironworks (forge) fuel varies from 5s. 6d. to 6s. 6d. per ton, and furnace coal 9s. to 10s. Domestic coal is 7s. 6d. for ordinary shallow to 9s. for best shallow, and 8s. 6d. for ordinary deep to 10s. for best deep. Cokes are 14s. 9d. to 15s. for South Yorkshire sorts delivered, and best 16s. delivered. Welsh cokes are 15s., and Durham foundry sorts 23s. delivered. For good native stone, similar to "gubbin," consumers offer 11s., while vendors demand 12s. per ton. Northampton ore is 5s. 10d. to 6s. delivered, with a fair sale. Pig iron is quieter than for several weeks and prices are without alteration. The manufactured iron trade is annohanced on the week. The only new feature stablishment has a very high reputation, a fair amount of business has been done. In merchant iron also trade has become rather better, but the whole of the mills are not doing so much as they could. Fine malleable light castings are being produced in moderate quantities, and this branch has extended from its original seat to the chief town of the country, and where it appears likely to flourish, as it has done for nearly a century at Dronfield, where the castings were first produced by the patent of Sam Lucas, and the same process is now being carried at on many places, both at home and abroad.

House coal has gone off much better of late than for some months previously, and prices have gone up, but not to the extent that some papers have announced. In all probability 6d. per ton advance at the pits is much nearer than any other sum, for coal is plentiful in all districts; so much so, indeed, that in many of them the men continue on short time; and so long as this is the case, any really material rise is out of the question. There is, however, no doubt that with the increased consumption, the usual winter advance of a shilling per ton will be realised before so very long. The trade with the Metropolis has improved considerably of late, and this has been felt by the Derbyshire colliery owners more probably than any other, seeing that fully two-fifths of all the coal that its sent by failway to London goes from the Derbyshire pits, the carriage rate being so much less from the districts in that country than from many other, seeing that fully two-fifths of all the coal that its sent by any affects the price of it, which is the same during the whole of the year. Steam coal has undergone butlittle change of late, for not much of the week. Cossumers are no longer dependent for supplies upon the week cost the price of it, which is the same during the whole of the resumption of the resumption of two products and prices are a shade easier. It will be taged to part the call end trade as whole wears a more healthy appear

rest having got tired of rendering help, the strike hands at the close of last week made signs of distress, which the butties understood. The latter consulted the mine managers, and arrangements were entered into for affording them an opportunity to go down the pits on Monday this week. The Central Strike Committee could not dam on Monday this week. The Central Strike Committee could not dam
the stream, and on Monday afternoon passed a resolution sanctioning the going in upon condition that notice be given for a return, a
fortnight hence, to the old wages. With but rare exceptions, all the
hands for whom work can be found are again in employment. The
number will be greater when the working places can be again made
ready for them. The strike is calculated to have entailed upon the

men alone a loss in wages of 150,0002.

An excellent and complete lecture upon "Iron" was delivered on Wednesday evening in the Industrial and Art Exhibition Building, in Wolverhampton, by Mr. William Farnworth, general manager to Messrs. E. P. and W. Baldwin, iron and tin-plate makers of Wolverhampton, and Swindor, Worcestershire. The theme was treated more in a historical than a technical style, though the chief ancient and modern processes for iron and steel making were described, with the aid of diagrams as to the Bessemer process; and specimens of steel and iron made were shown. Mr. Farmworth spent several days, he said, at Criel, about 40 miles from Paris, investigating the Pon-sard system, which was a combination of the Bessemer and the Sie-

mens-Martin. He came in the end to the conclusion that, though the system was theoretically right, yet that there were practical difficulties about it which made either of the two separate systems preferable to the Ponsard combined system. The Bessemer, the Siemens-Martin, and the Thomas Gilchrist were each and all triumphs of science, which had laid the iron trade of the world under indebtedness, whilst they were inventions of which any people might be justly proud.

ness, whilst they were inventions of which any people might be justly proud.

As far as demand is concerned, there is not quite so much to grumble about at present in the North Staffordshire Coal Trade. The approach of winter has given an impetus to the call for domestic fuel, and manufacturers are also buying more freely. There is still, however, the great bugbear of low prices, which, it is hoped, will soon advance. The pig-iron makers are somewhat better off, there having lately appeared a perceptible improvement in the number of orders received. But prices, unfortunately, do not get firmer. Most of the merchant mills are running five turns, and in some cases full time is the rule. For large sectional iron there is a steady demand. The plate mills are irregularly employed. Crown bars are quoted 5l. 12s. 6d. to 6l.; best qualities are 10s. more, delivered Liverpool.

TRADE OF THE TYNE AND WEAR.

TRADE OF THE TYNE AND WEAR.

Oct. 16.—The general trade of the district is in a state far from satisfactory. The iron shipbuilding trade continues in a most depressed condition, and thus has a very bad effect on the iron and other trades, especially in the marine engine and marine boiler works. A large number of men are out of employment on the Tyne and Wear. Fortunately the coal trade is in a fairly healthy state in all branches, with the exception of the works producing manufacturing coal, the demand for which is far short of the supply at present. There is a good demand for best steam coal, for which 10s. per ton is readily got. Should the weather in the North Sea continue moderate the exports of this coal for the next two weeks at least will be large. The demand for second-class steam coal is also fair, but some of the works are not fully employed. The quantity of best steam coal vended lately, and the small demand for steam small coal, has caused a great accumulation, and they are now offered at very low prices, f.o.b. on the Tyne. The coal is quite a nuisance at the works, and the owners are anxious to get rid of it at any cost that will cover the railway carriage. We have now a statement of the amount of coal and coke exported from the Tyne in the first nine months of this year, from which it appears that 6,954,383 tons of coal and 175,946 tons of coke were exported, against 6,832,167 tons of coal and 189,026 tons of coke in the corresponding months of last year, a total increase of 109,136 tons. The shipments at Blyth and Warkworth have also been increased since those harbours were improved. At Blyth the shipment of coal in the first nine months of this year were 281,091 tons, against 117,933 tons in the corresponding months of last year, an increase of 163,158 tons.

have also been increased since those harbours were improved. At Blyth the shipment of coal in the first nine months of this year were 281,091 tons, against 117,933 tons in the corresponding months of last year, an increase of 163,158 tons.

The Broomhill Coal Company now ship a large quantity of bunker and other coal at Warkworth. The shipments of coal on the Wear have also been good, and they have also increased at Seaham Harbour. The demand for gas coal is very strong; French and Mediterranean orders are coming in freely; prices on the oren market are from 6s. 9d. to 7s. 6d. per ton f.o.b. There is a good demand for Tyne and Wear Wallsend, and it is hoped that better prices will be secured for this coal during the winter; improved prices are much required, as some of the best firms in this branch of the coal trade paid no dividend for the half-year ended June last. There is little change in the state of the coke trade; there is a fair demand for export, but for inland and in the West Coast it continues moderate. There is no improvement in the Pig-Iron or Manufactured Iron Trades; and as the shipping season is about to close, and large stocks are still held by makers, the feeling is very gloomy. Makers are still determined to adhere to the price fixed by the combination—37s. for No. 3; and rumours are afloat that the make will be reduced shortly; but conflicting statements are made, and it is difficult to arrive at the true state of affairs. There is a panic in the trade at present, and an important meeting was held at Middlesborough on Monday, when there was a very large attendance. The meeting was private; but it is understood that the main topic discussed was to reduce if possible the make of pig-iron in the North of England. We believe that it was agreed that a special committee should be appointed to obtain certain information as to the advisability of blowing out a further number of furnaces to reduce the make, and so keep up prices. Another suggestion was made to appoint an official salesman for the dis improve the trade.

improve the trade.

The Times stated on Monday that the combination amongst the ironmasters had been broken up, but this we believe is not correct, as the meeting was really mainly composed of members of the combination, and it was adjourned for a week.

On the Wear the Shipbuilding and Engineering Trades continue much depressed, although a few orders for new ships have been got lately. On the Tyne there are more cheering signs in some quarters. At the works of Messrs. Palmer and Co., at Jarrow, a considerable amount of work has been got in the engineering and other departments.

ments.

At Messrs. Stephenson's a number of locomotives are in hand, some of them of the largest size. A considerable amount of general work is also in hand. At Messrs. Hawthorn's some fine locomotives are in course of construction, and also other engines and boilers, and in those works we notice that steel is being substituted for iron in all possible cases. Visiting the works we were shown specimens of steel manufactures of various kinds from the best works on the Tyne, from Sheffield, and some fine wheels, &c., from Belgium, and we were much surprised to hear that the steel castings from the latter country are superior to any produced in this country. This is certainly not creditable to the steelmakers of England.

There is also a large amount of work in hand at the great Elswick Works. The new steelworks are approaching completion, and also the shipbuilding works, and a start has been made with a ship of the Esmeralda type for a foreign government.

A New Engineers' and Shipbuilders' Association. — On Oct. 8 a meeting was held in the Surgeons' Hall, Newcastle, for the purpose of forming an institution of this character, Mr. C. W. Hutchinson (of Sir W. Armstrong and Co.'s) occupied the chair. There was a good attendance, the project having been warmly taken upply both employers and acepts &c. The Chairgan stated that the

Hutchinson (of Sir W. Armstrong and Co.'s) occupied the chair. There was a good attendance, the project having been warmly taken up by both employers and agents, &c. The Chairman stated that the society would proceed on new lines, and there would be no opposition to existing societies. They wanted an interchange of ideas on all branches of those trades carried on here. Forgemen, foundrymen, workers in steel; in fact, in every branch of work connected with the engineering and shipbuilding trades. The electrician was a man without whom they would hardly be able to live in the future; a man without whom they would hardly be able to live in the future; and the gas engineer was also developing his work very rapidly. They wanted papers read and discussed on all those subjects. There would be two grades in the proposed institute—one for employers and one for employees. A committee was appointed, with Mr. Hutchinson as chairman, to carry out the business and arrange for another meet-

start would be made with 100 members.

[That there is a necessity for such an institute we have no doubt whatever. The competition to be met with from other countries in manufactures is very keen; to prove this we need only point to the remarks we have made above respecting the steel goods now brought to the Tyne from the Continent.]

NORTHERN INSTITUTE OF MINING AND MECHANICAL ENGI-NORTHERN INSTITUTE OF MINING AND MECHANICAL ENGINEERS.—A general meeting of members was held in Newcastle on Oct. 11, the President (Mr. John Daglish) in the chair. A paper "On the Principles of Electric Lighting, and the Construction and Arrangement of Electric Light Apparatus," was read by Mr. Sydney F. Walker, of Cardiff, who described the different modes of generating electricity, illustrating the structure and construction of many of the dynamo machines, and the importance of having those machines driven by engines worked with the utmost possible uniformity of motion. He described the various modes of lighting by electricity, and the principal modes by which the consumption of carbons is regulated. Incandescent lamps were next described, the honour of

Oct

MINEC

A case cided by of share feiting al decided

counsel not de fi

was cont the get the acco

Parry W mas so, a claimed This

eiture,

legally of Cost book m The a

those W

say thi

mle b 2000l. Minin

m.P.,
power
we
up th
comm
specu
44,00
had ;
sink

cting the application of which he believed to be due to Mr. f Newcastle. Other incandescent lamps, although their in-usually adopted some form of globe and connection differing from those of the Swan lamp, really only differed in the se and form of the filament. Edison used carbonised bamboo, substance and form of the filament. Edison used carbonised bamboo, Maxim Bristol board, Lane-Fox bass-broom, and Crooks carbonised cotton. A new lamp on the same lines as the Swan, called the Woodhouse and Rawson, was the only one that appeared to rival it. He concluded by giving a description of the installation of those lamps at the Cymner Colliery, in South Wales, where the Brooke lamps are used, and also of the same lamps, which have been got to work at the Eppleton Pits, Hetton Colliery, on the Wear. At this establishment we may state that those lights have been got into use at the surface, and also underground, and so far the light has given much satisfaction. The electric light has also been introduced at the Page Bank Colliery in Durham, at the shipping place of the Lambton Coal Company on the Wear, and other places. It is also to be introduced at the Benradon and other collieries in Northumberland.

REPORT FROM NORTH WALES, SALOP, AND CARDIGAN.

Oct. 16.—Among the long list of defunct public companies, which filled nearly a column of the Journal last week, it is satisfactory to notice that there are only 14 belonging to North Wales. These are eight lead mines, one mine each of copper, iron, and phosphate of lime, one slate quarry, and two gas and water companies. The failure of the slate quarry is accounted for by the fact that it lies 13 miles from a railway station, and was imperfectly opened. Four of the lead mines show by the prefixes of "West" and "New" that they were partly at least trading upon the reputation of peighbouring were partly, at least, trading upon the reputation of neighbouring mines. Of the rest, two were situated in Merionethshire, a county which has not, I think, ever produced a profitable lead mine. A perusal of the list is useful, also, in a general way, as showing that the proportion of unsuccessful mining ventures is not so large as

that of general businesses.

A movement is now on foot for extending the North Wales narrow-gauge railway to Carnarvon Slate Quay, following to some extent the old Carnarvon and Nantlle tram-road, and crossing the entrance to the slate port by a swing bridge. This is intended to avoid the transhipment of slates at Dinas Junction. The various slate quarries connected with this little railway about Moel Tryfaen are working steadily, so also are those of the Nantlle and Llanberis Valleys. The ftestiniog quarries are beginning to feel the effect of the approach of the close of the navigation season in the Baltic. The close of the summer traffic on the railways has brought a considerable reduction eipts, amounting last week on the Cambrian Railway to 3267. but still leaving an increase on the receipts of the half-year of 366. The endeavour to amalgamate the two great copper mines at Anglesey still proceeds, and it is hoped that it will soon be completed. An important brick and tile works has recently been established on this island on the coast near Holyhead, where there is a fine deposit of clay, which yields on burning, very hard bricks im

The collieries of the Flint, Wrexham, and Ruabon districts are with few exceptions, fully employed. The owners of the Llay Hall Colliery, situated between Wrexham and Mold, who recently gave notice to the men of 5 per cent, reduction in their wages, have sought to compromise the matter by offering an increase of 1d. per ton in the price paid for getting the coal. The men will not accept this, and are paid off. They will, doubtless, readily find work in the adjacent collieries. With prices firm, and orders plentiful, it is hardly the time to effect further reductions in wages. The gear at the head of an incline at the Westminster Colliery, near Wrexham, broke last week, and the wagon rushing down killed Pryce Jones, 60 years of age, who was repairing the timber of the roof.

An interesting exhibition of gas appliances, promoted by the Chester Gas Company, is being held in the Music Hall, Chester. Mr. Thwaites, of Liverpool, is giving lectures on cooking by gas, and Mr. T. Fletcher, of Warrington, is lecturing "On some Curious Properties of Coal Gas." An interesting plan is exhibited of the Singer Sewing Machine manufactory, near Glasgow, and numerous machines notice to the men of 5 per cent, reduction in their wages, have so

Sewing Machine manufactory, near Glasgow, and numerous machin

are driven by Bischoff's gas-engine.

The ceremony of cutting the first sod of the Wirral Railway, near Birkenhead, by the Premier to-morrow, will be a grand affair, and some of the foundries and machine shops will observe a half-holiday

The demand for a poll of the ratepayers of Manchester made by Mr. Lynde, representing the London and North-Western Railway Company, against the proposed ship canal, has been withdrawn by that gentleman. There is no doubt that the inhabitants of the towns and districts along the course of the canal are enthusiastic in its favour. The prices of the various kinds of iron are better and firmer than they have been for a long time past. Pigs command an advance of 6d. per ton, and manufacturers' iron 3s. to 8s.

The demand for the Clee Hill "Ddu," or black stone, is good. This is the basalt, which has broken through and overflowed the little isolated patch of the coal measures near Ludlow, 'in South Shropshire. It makes a very hard and durable road metal. The quarries in the greenstone and syenites along the North Wales coast for stone for similar purpose and for paving setts are better employed than they were a short time ago. Most of such quarries as were situated inland are now closed, the low price of the material not admitting of a long railway carriage. The limestone quarries and the fire-clay works are well employed, and, excepting the lead and copper mines, the whole trade of the district is fairly good. demand for the Clee Hill " Ddu," or black stone, is good. This

TRADE IN SOUTH WALES.

Oct. 16 .- The shipments of coal in the month of September at Oct. 16.—The shipments of coal in the month of September at Cardiff amounted to 607,227 tons foreign and 84,079 coastwise, with 13,683 tons patent fuel; Newport, 143,379 tons foreign and 100,643 coastwise; Swansea, 79,945 tons foreign and 59,125 coastwise, with 20,917 tons patent fuel. Last week Cardiff sent away 133,212 tons foreign and about 20,000 coastwise, with 3750 tons patent fuel; Newport, 35,647 tons foreign and 26,713 coastwise; Swansea, 13,575 tons foreign and about 14,000 coastwise, with 5380 tons patent fuel. The best sorts of steam coal are in great demand at Cardiff and Newport, while at Swansea merchants are not well supplied with orders. House coal is improving, as is usual with the advent of cold weather.

The London and North-Western searcely took as much as usual

The London and North-Western scarcely took so much as usual last month from the South Wales collieries, the Aberdare Company, as usual, taking the lead so far as that line is concerned, and last month put on to it 4200 tons, whilst only about 1000 tons was sent over it from Bwilfa, and 800 tons from Fforchaman. Middle Duffryn, however, put 2000 tons on to it, and Cwmdare 1500 tons. The Great Western took something like an average from several of the collieries Iron Company again headed the list in September with 4600 tons, whilst Aberaman fell off 2500 tons; Mountain Ash was credited with 4000 tons; Bwllfa, with 2300 tons; and Merthyr-Aberdare with about the same quantity. From Fforchaman there was sent during last month 2800 tons; from Cwmdare, 220 tons; and from Ebbw Vale, 1600 tons. There was also a falling off so far as the Great Western is concerned, from Nixon's Navigation, Merthyr, Crawshay, Blaina, and some of the other collieries.

Biains, and some of the other collieries.

The amount of iron shipped in the month of September from Cardiff was 8841 tons, making 67,565 for the first nine months of the year; Newport, 4528 tons, making 90,796 tons; Swansea, 53 tons, making 3095 tons. Last week Cardiff only sent away 410 tons, while Newport did not ship a single ton. The outlook of this industry is extremely gloomy. The arrivals of iron ore at Cardiff amounted last week to 4800 from Bilbao, and 1674 from other places; Newport 11.710 from Bilbao, and 1676 from other places; Newport 11.710 from Bilbao, and 1676 from other places.

port, 11,710 from Bilbao, and 5150 from other places.

Tin-plates are in good demand, at from 14s. 9d. to 15s. per box.

The works are in full swing. The Caerleon Tinworks will be opened

VENTILATION IN MINES.—The attention of mineowners and engineers is called to a patent fan, which claims to have many advantages over any other in the market, and especially over the fur-

nace system of ventilation. The sole manufacturing license has been acquired by Messrs, Cowlishaw and Shore, of the Railway Foundry and Engineering Works, Etruria, Stoke-on-Trent. It is said that it is the only fan in which the direction of the current of air in passing it is not changed, and it discharges over practically the whole of its surface, consequently, a fan of comparatively very small diameter can be used. Owing to its peculiar construction very little power is required to drive it, which together with the low cost of the fan itself makes it well worthy the consideration of those interested in mining. In these times, in order to make mining at all remunerative, it must be conducted with the most rigid economy, and any instrument likely to bring this about deserves careful attention. The fan has already been introduced into some of our coal mines, where it is giving every satisfaction, and reported upon by the Government Inspector of Mines. and is favoura bly

NEW RAILWAY SLEEPER.

Amongst the latest inventions connected with railways, one of the most important is the Hungerford iron sleeper, at once the reverse of those hitherto made, being concave instead of convex, and settling for ever the practicability of doing without bolts or fish-plates. These sleepers are made of ‡in. channel iron or steel 8 ft. long, 9 in. wide, and 2 to 3 in. deep. There is a recess or piece stamped out of each side sufficient to allow the rail to slide in, so that it rests upon an iron chair or held-plate which is inserted that it rests upon an iron chair or held-plate which is inserted. that it rests upon an iron chair or bed-plate, which is inserted between the base of the rail and the sleeper, and provided with a curved jaw adapted to overlap the base of the rail, and hold it to the plate. The latter is then driven up against the rail, one end of the base of the latter is brought into the recesses, whilst the other edge is at the same time caught by the jaw, so that the flange recesses and jaw jointly act on the rail to hold it in position. The chair or bed-plate is chamfered or bevelled on one edge to facilitate its insertion beneath the rail, and it is locked in the sleeper against the rail by means of an iron or steel wedge toothed key, which is driven through two slots or holes in the flances of the sleeper, and bears against one edge of the plate or. that it rests upon an iron chair or bed-plate, which is inserted wedge toothed key, which is driven through two slots or holes in the flanges of the sleeper, and bears against one edge of the plate or chair, so that the key tends to prevent both an outward and upward movement of the rail, Directly under the rail a piece of the sleeper is punched out in the shape of a \gt , and bent downwards to form a web for the purpose of holding the sleeper in place, more particularly for use in curves. When two rails join each other they are fixed in like manner, save that the jaw is extended upward to catch under the head of the rail and afford to it a support, thus dispensing with the ordinary fish-plate, as by its provision it has a better and safer fish joint than any other device known, preventing the possibility of sliding or shifting, without the additional heavy expense.

bility of sliding or shifting, without the additional heavy expense.

The sleeper between the rails is filled in with ballast or concrete
on a well-made road, which adds to its stability and immovability,
at the same time deadening the sound, and enabling the train to run smoother, and with much less noise than is now the case on the ordinary wooden sleeper. Once laid down the road bed has never to be disturbed by digging and loosening the material that supports the track, as in the case of the wooden ones, which become ing rotten every two or five years require to be taken out and re-placed by new ones, making it necessary to break up the bed, ren-dering it uneven and breaking the steady motion of the carriages at all points where new sleepers are placed amongst old ones; and whilst wooden sleepers are bedded in the ground and form a ditch for the water to settle in, by the action of constant traffic thereon, thus loosening the earth, they require to be continually watched and filled under with material, tamped in, to secure any sort of safety at a great expense. These iron sleepers lie firm on the surface of the road bed, and by lowering the earth or ballast a trifle between the sleepers it allows the water to run off the track, and the material that supports them is dry and permanent. Spikes or bolts driven in wooden sleepers are also continually getting loose and unsafe, whereas with the iron ones there are neither one nor the other to get

whereas with the iron ones there are neither one nor the other to get loose, and consequently every part is kept in place. All this expense is therefore avoided, and what perhaps will tell in a greater degree is the saving effected by the daily inspection of every sleeper on the line to examine whether or no the wooden key requires tightening. To every company this item is a matter of vast importance in its financial aspect. The rapidity and facility of replacing the new rails for old ones must commend itself both to engineers and shareholders It seems, indeed, likely that this iron sleeper should lessen the expense of maintaining the line in good order by fully 60 per cent., thus increasing the sum available for dividends by a like amount. It is rapidly coming into use in the United States, and is to be exclusively used throughout the 300 miles of the Northern Guatemala railroad now in the course of construction.

Arrangements are also in progress with the Belgian Government

Arrangements are also in progress with the Belgian Government and manufacturers for laying down a short piece of line with these sleepers for the purpose of testing them. For tropical climes, and when there is a scarcity of timber, these iron sleepers are invaluable, being proof against rot or destruction by insects, each having a duration at least equal to five wooden ones, easily handled, and rapidly laid down. No better sleeper could be devised than this for sandy countries, such as in Egypt or between Suakim and Berber, for by stamping out a small piece of the bottom, the sand and water would always be forced up through it, and the bed kept perfectly firm.

THE PRIME MERIDIAN CONFERENCE.

It will be agreed by all that the practice of using different prime At will be agreed by all that the practice of using different prime meridians is extremely inconvenient, and that it is of great importance that the charts used by our seamen, whether prepared in England, America, France, or Germany, should be uniform. The proceedings, therefore, which have taken place on the subject, just held at Washington, will be read with considerable interest. The decision arrived at may be considered as very satisfactory, and especially flattering to England as the meridian chosen is that running through Greenwich. There was, comparatively speaking, little opposition to the selection of this line. The delegate of San Domingo voted against it, and the French and Brazilian delegates abstained from voting at all, while the representatives of 21 of the chief States of Europe and America were in favour of it. Although the decision strived at does not bind any of the Governments whose delegates voted, there is little doubt that their decision, which recommends itself to good sense, will be very generally ratified. however, shown great reluctance to place the name of Greenwich on her charts. Her delegate thought that Greenwich was not a scientific meridian, and that it implied no progress in any science, but was merely a commercial standard. Since, therefore, nothing would be gained to science by adopting Greenwich, France could not make a sacrifice of her own meridian. With the present system, when the navigator is desirous of ascertaining his position, he is under the necessity of making corrections, because his he is under the necessity of making corrections, because his chronometer shows Greenwich time, while his chart is constructed with reference to a meridian passing through some other place. The French delegates not finding support in their objection to the Conference attempting to select a particular meridian, proposed that a neutral meridian should be chosen, suggesting a line passing through Behring's Straits or one of the Azores. This would of course necessites the alteration of all critising many and as many he imagined. Behring's Straits or one of the Azores. This would of course necessitate the alteration of all existing maps, and as may be imagined did not meet with much support. The proposition also of the adoption of the 180th deg. east of Greenwich was negatived. What perhaps helped most of all to turn the scale in favour of Greenwich was the statement of Sir Frederick Evans, that the shipping tonnage controlled by the Greenwich standard was about 14,000,000 tons, and that controlled by the Paris one only 1.735 000 tons.

and that controlled by the Paris one only 1,735,000 tons. The Philadelphia Railway Time Convention also sent a resolution passed by them protesting against any changing of the locality from Greenwich. The question whether the numbering of the degrees should be from east and west of the meridian or from east continuously round the whole globe was discussed, but it was generally agreed that it was a more matter of detail and no vote was taken on the subject. was a mere matter of detail, and no vote was taken on the subject.

One would think that Greenwich not being a capital would be considered neutral by France. An attempt was made to discuss another very important matter—the general use of the metric system of weights and measures: The system is now used in scientific re-

search, but for trade purposes we still adhere to the tons, miles, and gallons. The Spanish Minister hoped that England, the United States, and the other States there represented, would adopt the metric system, as recommended by the Conference held at Recommended. but the President thought it was not a matter for was dropped.

PRIME MOVERS AND BOILERS AT THE TURIN EXHIBITION.

EXHIBITION.

An interesting description of the prime movers and boilers at the Turin Exhibition has been contributed by Mr. P. LE NEVE FOSTIR to the Society of Arts Journal, in which he says the progress made in Italy during the last quarter of a century in mechanical industry is seen by the excellent show at the Turin Exhibition, and it is clear England must use every effort to hold her own with regard to finding a market for her machinery in Italy. The imports of English machinery into Italy is on the decrease, and before long the intelligent labour displayed by the Italians will render them entirely independent in this respect of other countries. At the first Italian National Exhibition, held at Florence, in 1861, the largest steanengine exhibited was one of 32-horse power. At the Milan Exhibition, three years ago, the most powerful motor shown was one of 150-horse power; whilst at the present Exhibition the power of some of the engines is from 200 to 250 nominal horse-power, and reache, in the case of Messrs, Neville and Co.'s fire-engine 310 indicated in the case of Messrs. Neville and Co.'s fire-engine 310 indicated horse-power. Most of these engines can compete very favourably with those of other countries as regards workmanship, design, and price. Great attention has been paid to the economical use of steam, hence we observe in all the exhibits that in designing them the utmost care has been bestowed on all the details, especially relating to the distribution of steam to the cylinders.

care has been bestowed on all the details, especially to those pate relating to the distribution of steam to the cylinders.

The motivo-power to the gallery of machinery in motion is furnished by eight engines supplied with eight boilers of various type. The first boiler is of the Fairbairn type, with double flue. Its heating surface is 100 square metres (1076 square feet), and the grate surface 2:40 square metres (25:83 square feet). The working pressure is 5½ atmospheres (82½ lbs. the square inch). The next boiler is of the Lancashire type, with double flue, the heating surface of which is 97 square metres (1044:23 square feet); grate surface, 2:75 square metres (29:60 square feet). It is furnished with Lulzer water-heating tubes, and a grate adapted for burning small coal and dast. The fire bars are fixed across the furnace instead of longitudinally, as is usually the case, and air is supplied by a Körting blower. The third boiler is of the marine type, cylindrical, with Fox's corrugate furnaces. Its diameter is 2:38 metres (7:80 feet), and length 4:55 metres (14:92 ft.). The tube plates contain 60 tubes. The heating surface is 89:59 square metres (99:77 square feet); grate surface, 1:73 square metres (18:61 square feet; working pressure, 6½ atmospheres (97½ lbs. to square inch). The fourth boiler is of the "Ten Brink form, consisting of three cylindrical shells placed one above the other. The heating surface is 56 square metres (602:80 square feet), and grate surface 0:87 square metres (793 square feet). The fifth boiler, also of the "Ten Brink" form, has double flues, a heating surface of 65 square metres (709:67 square feet), and grate surface of 11:60 square metres (1201:30 square feet), and grate surface of 11:60 square metres (1201:30 square feet), and grate surface of 11:60 square metres (1201:30 square feet), and grate surface of 30 square metres (1201:30 square feet), and grate surface of 30 square metres (1201:30 square feet). and largest boiler in the Exhibition is of the "Ten Brink" type has a double furnace with heating surface of 111-60 square metres (1201-30 square feet), and grate surface 2-30 square metres (21-85 square feet). This boiler is fitted with an apparatus for consuming smoke. The two other boilers are of the Cornish type with Lulzer water-heaters. The first, with double flues, has a heating surface of 80 square metres (861-14 square feet), and grate surface of 2 metres (21-52 square feet), whilst the second with a single flue has 44 square metres (473-55 square feet) of heating, and 1-12 square metres (12 square feet) of grate surface. This boiler is adapted for burning the spent bark from tanneries, and is fed by a hopper placed, above the furnace. A second group of locomotive hopper placed above the furnace. A second group of locomotive boilers supply steam to the engines of the electrical department. The water for the grounds and general purposes is pumped up from River Po by a 40 nominal horse-power engine, which with the pump River Po by a 40 nominal horse-power engine, which with the pu and boilers are placed in a building near the river edge. The wi is forced at the rate of 60 litres per second (13-20 gals.) throug length of 440 metres of cast-iron mains to a vertical height of ab

The boiler is of the MacNichol type, with total heating surface of 60 square metres (645.85 square ft.), and 2.72 square metres grate surface. The working pressure is six atmospheres (90 lbs. to square 60 square metres (645.85 square it.), and 2.12 square surface. The working pressure is six atmospheres (90 lbs. to square inch). The engine is of the horizontal compound condensing type, the cylinders being placed parallel to each other are respectively 0.24 metre (92 in.) and 0.44 (172 in.) in diameter, with 0.50 (24 in.) stroke. The air pump is worked direct from the piston-rod of the low-pressure cylinder. The expansion gear is automatic. The crank shaft carries a pinion, which gears into a spur wheel on another shaft, placed at a lower level, the former making 80 revolutions per minute to 12 of the latter, from which the pumps are worked. The to 12 of the latter, from which the pumps are worked. are of the Girard type. The four barrels are placed in pumps are of the Girard type. The four barrels are placed in pairs horizontally with one plunger to each pair, actuated by a piston rod with crosshead working in slides with connecting rod from crank pin. Between each barrel is a tank filled with water, in order that the plunger glands shall always be submerged. The plungers are of cast-iron, hollow, and their weight being equal to the quantity of water they displace friction is reduced to a minimum. Another set of four pumps of the same type as the others, but with important modifications, pump the water from the ornamental tank which first receives it from the river, to the entrance to the gallery of machinery in motion. The stroke of these pumps can be varied by altering the position of a pin or disc, which is used instead of a crank for actuating the connecting and plunger rods. Each pump is independent of the other, the valves are of india-rubber, and the chambers in pumps are of the Girard type. position of a pin or disc, which is used instead of a crank for actualing the connecting and plunger rods. Each pump is independent of the other, the valves are of india-rubber, and the chambers in which they work are easily accessible. Another exhibit is a single-cylinder non-condensing engine of 20 nominal horse-power, with variable expansion. The slide and expansion valves receive a reciprocating motion from a disc fixed at the end of a strap driven we right angles to the crank shaft by mitre gearing. An engine of the right angles to the crank shaft by mitre gearing. An engine of the horizontal "compound tandem" type, with cylinders 0.32 metres (12\frac{1}{2}\text{ in.}) and 0.49 metres (19\frac{1}{2}\text{ in.}) diameter and 0.80 metres (2ft. 7\frac{1}{2}\text{ in.}) stroke, is, for beauty of workmanship and design, unrivalled in the whole exhibition. The cylinders are fitted with equilibrium valves, those for the admission of steam being actuated by eccentrics fixed on a shaft driven at right angles to the eccentrics fixed on a shaft driven at right angles to the by eccentries fixed on a shaft driven at right saigles to crank shaft by bevel gearing. All the principal parts are under the control of the engine-driver, who from a stand can handle the starting valves, injection-cocks, feed to boller, and the four drain-cocks of the cylinder, the gauges being also placed within sight, we that everything can be regulated from one place. The fiy-wheel is 4 metres (13 ft. 1½ in.) in diameter with five grooves. The engine is furnished with automatic lubricators and speed indicator. The most region is design in a horizontal high pressure single cylinder original engine in design is a horizontal high pressure single cylinder condensing one of 60 nominal horse-power. Its originality consists in the application of an incompressible fluid—oil, for working the in the application of an incompressible haid—oil, for working walves in the place of the usual rigid rods and levers. The two stead valves which are placed upon the upper side of the cylinder are one trolled by means of a force-pump filled with oil, which is worked from an occentric fixed upon the crank-shaft, the oil being force by the nump, through place companying and the crank-shaft, who shall cylinder the companying the smaller of linder. by the pump through pipes communicating with smaller or plinders fitted with pistons, which raise or lower the steam valves. The exhaust cocks, which are adapted to the lower side of the cylinder, are actuated by levers connected with a separate eccentric main shaft. The air-pump of condenser, which is placed below the engine-room floor, is rotary, and is driven by a belt from a pulley on crank-shaft.

QUEEN'S BENCH DIVISION.—In the matter of Mr. E. J. Bartlett, there was a further hearing before Mr. Registrar Murray, on Wednesday, when the debtor applied to pass his examination. His liabilities were stated at 9580., with assets 3981., and he attributed his failure to heavy losses by bad debts and the depreciation in the value of securities, arising chiefly from speculative investments in mining companies. Mr. Aldridge appeared for the official receiver; Mr. Wynne and Mr. Rogers for creditors; and Mr. Chandler for the debtor

miles, and the United adopt the at Rome,

RIN

FOSTER
FOSTER
ess made
industry
t is clear
t to find.
English
intelliirely in.
I Italian

is fur.

grate

for

er is by a tive ent. rom

li was stated that bad debts to the amount of 14,000%. due from com-liss which had gone into liquidation, were entered in the accounts, neils which had gone into liquidation, were entered in the accounts, the Registrar granted an adjournment in order that some further

WATSON BROTHERS MINING CIRCULAR.

WATSON BROTHERS, MINEOWNERS, STOCK AND SHARE DEALERS, &co. 1, ST MICHAEL'S ALLEY CORNHILL, LONDON

1, ST MICHAEL'S ALLEY CORNHILL, LONDON

A case very important to the interests of Cost-book Mines was decided by a jury on Monday. Some months ago, at a general meeting of shareholders in West Crebor Mine, a resolution was passed forfaiture should not release the holder from decided that the said forfeiture should not release the holder from decided that the said forfeiture should not release the holder from against for the calls due. At that meeting also another call was made. For the arrears an action was brought in the name of the said. For the arrears an action was brought in the name of the company, and a verdict obtained; against this the shareholder appealed, and, as we are informed, the appeals were at once dismissed by the judges. The action on Monday, "Parry v. Colmer," was to go the facto the purser, a Mr. Horswell having been appointed to the local office for paying the miners, &c. On behalf of the company it general business of the company, receiving calls, keeping the general business of the company, receiving calls, keeping the socounts, and making payments for the local agents to disribute. The judge therefore left it to the jury to say whether Mr. Parry was or was not de facto the purser. The jury found that he sate, and a verdict was entered for the plaintiff for the full amount claimed, with costs.

claimed, with costs.

This establishes two important points—first, that forfeiture of shares does not release the owner from calls due at the time of forfisiure, and that the secretary and purser can sue for the company. Perhaps the most singular part of the whole affair is that the defendant who has gone on defending these cases, involving calls legally and properly made, and raising questions as to the legality of Cost-book rules and resolutions, is himself the secretary of Cost-book mines, one of them holding a very prominent position.

The action also shows clearly that one of the worst features of the Cost-book, and one which has frequently been taken advantage of by mere speculators, cannot be maintained; for it has been too often the practice for parties to get heavily in arrear of calls in mines when they are poor. Thus for many months they are carried on by those who do not or will not till this discovery takes place. If no discovery has been made they have relied upon the forfeiture of their shares to relieve them of payment of just debts. We do not say this applies to the present case; but the practice is notorious, and the action now settled upsets all this, and will, no doubt, be applied to other mines at once.

The lode in the New Caradon is 2 feet wide, yielding splendid teness of vellow conper ore.

The lode in the New Caradon is 2 feet wide, yielding splendid stones of yellow copper ore.

The points in operation at East Blue Hills are worth in the aggre-nte 35l. per fathom.

New Langford has sold about 701. worth of blende and silver ores.

site 351, per fathom.

New Langford has sold about 701. worth of blende and silver ores.

Since Sept. 30 the fall in the standard for tin ore in Cornwall has been equal to 71. per ton, and the present margin of profit to the smelter is equal to 101. per ton—a very nice percentage indeed. Singular enough, almost immediately after the last drop of 31. on Tuesday, metallic tin began to rise.

On Thursday the D'Eresby Mountain Mine was put up to public sale by auction by the liquidator, the reserve price put upon it being 30001. At this price it was purchased by Mr. Parry for the D'Eresby Mining Company (Limited). On Friday a meeting of those who had signed the Articles of Association of the new company was held to appoint directors, and 6000 shares were allotted to applicants, nearly, if set all, of whom were shareholders in the old company. The directors appointed were—the Right Hon. G. Cavendish Bentinck, M.P., the Rev. J. B. Fenwick, and Mr. J. Y. Watson, F.G.S., with power to add to their number; secretary, Mr. C. B. Parry.

We have all along strongly advised the old shareholders to take up their interest in the new company, and we may now safely recommend the shares to all who care to go into a bona fide and grand speculation at a very low price. In the old company there were 44,000 shares, and upwards of 20,0001. were spent in the mine, which had yielded 600 tons of lead ore, when it was found necessary to sink a new shaft from surface to the ore ground. This was nearly completed at a cost of 20001. altogether, when funds were exhausted, and the shareholders declining to subscribe for debentures, we, as treasurers and the largest shareholders, also declined to make further advances; thus the company was wound-up and the present new one formed. It is in 12,000 shares only, 6000 of 11. per share fully paid up, and 6000 with 10s. per share paid, and if the agents' reports are correct, the mine ought to be making profits in less than in months.

In explanation of the fully paid-up shares, we may add that, on

six months.

In explanation of the fully paid-up shares, we may add that, on the dissolution of the old company, it was determined to offer all shareholders in it a proportion in the new company of fully paid-up shares free, on their taking up a number of the shares with 10s. paid. Thus a holder of 1000 (44,000th) shares in the old company was offered 250 in the new, on which he would have to pay 10s. down, and then have allotted to him 250 with 11. fully paid-up, making his holding 500 shares. We hope to see a good deal doing in the shares now, particularly as lead is rising.

MINERAL GEMS.—Mr. Willimott, a member of the Geological Surey, has had a most successful season in his researches through Central Canada for mineral specimens. He has, says the Canadian Mining Gazette, succeeded in adding to the collection in the Museum many gems in the form of crystals, sphenes, and zircons, and some of the garnets he has recently collected excel in beauty anything ever before found in Canada. Mr. Willimott is a painstaking and efficient officer, and is to be congratulated on the present appearance of the Museum. The classification and arrangement of the specimens have had his personal supervision, and the result is evidence of his skill in such work.

OUR GOLD SUPPLY.—The author of this work—Our Gold Supply; its Effect on Finance, Trade, Commerce, and Industries. By Thos. Corner, M.E. London: Eden Fisher and Co., Lombard-street—has had the opportunity of acquiring much valuable experience and information relative to gold mining in various parts of the world, especially in the Australian colonies, where on Ballarat and other Fold fields he is well known to only a practical miner, but as an especially in the Australian colonies, where on Baharat and other gold fields he is well known not only as a practical miner, but as an authority on all matters pertaining to the gold mining industry. Mr. Comish first treats of the value of gold as a special form of wealth, and its importance to aid the extension and development of other kinds of wealth. Howays—"Gold is real wealth, and the standard by which all other wealth is measured. Its production is the creating of a new nurchasting rower, not only so far as its intrinsic value is con-

having had an Australian, American, and African experience, has been observant in his travels, and his opinions and views of the auriferous resources of those countries, and the management and valuing of gold mines are worthy of the most serious consideration of all interested in the production of gold. It is an interesting and valuable work, and should be read by all who are connected with finance, trade, commerce, and industries.

able work, and should be read by all who are connected with finance, trade, commerce, and industries.

New Quartz Crusher.—A new mill for the treatment of hard quartz is being extensively introduced amongst American miners, which it seems is fast taking the place of the old stamps and becoming very popular. It is a cylinder and curved cone powerfully constructed, having, mechanically considered, the same or a common central point below, while above there are two, giving the cylinder a slight oblique position; usually the variation is small, but is regulated as required for the work to be done. These two bodies (cylinder and cone) by a proper arrangement rest upon a series of hard iron balls in circular grooved tracks above and below, moving or rotating freely upon them, turning together in the same direction, and upon the introduction of quartz the cylinder and cone close continuously upon it, exert a terrible force, and the rock breaks up from point to point until it finally falls out through the discharge space of such degree of fineness or size desired. Some of the special features of the machine are—that its movement is rotatory, it crushes either wet or dry material equally well; it runs light, makes little noise, and does not injure by running empty. It is also made in light sections for conveyance over country, occupies little space, and can be set up or removed quickly. It will take good sized quartz, dispensing with the rock breaker. The gold is left bright and easy to amalgamate. The cost of the frame is very little, and it can be constructed by any one at the place where used, thereby saving freight and packing. In comparison with the stamp ordinarily used it costs less, has less wear, takes less power to run, and is not more than one-fifth of the weight of a stamp of the same capacity. The mill, which is called the Dyer Cannon Ball Quartz Mill, does not claim any amalgamating properties other than they leave the metal in the best condition for the amalgam. The manufacturers are the Globe Ironworks C

IMPROVED GAS ENGINES.—Gas has now thoroughly established itself as a motive power where light work is to be performed, and the attention of engineers is now concentrated upon improving the engines adapted to its use so as to obtain the greatest amount of power at the lowest possible cost. The ATKINSON's patent gas engines, constructed by the British Gas Engine and Engineering Company, have many advantages over others hitherto offered to manufacturers. Some of the special features are that the engines compress the gas and air in the front and cool end of the cylinder, thus avoiding the complication of a separate pump. The cylinder being closed at both ends no oil is wasted, and but little is required, by an arrangement of two perfectly-balanced fly-wheels, the heavy initial pressure common to all gas engines is transmitted directly to them, avoiding the serious strain on the shaft incidental to other engines. The engine rests on three points, one under each main bearing, and the other immediately under the cylinder, which is not overhung. The cylinder is inserted in a large box casting filled with the circulating water, which gives stability. The foundations required are very slight, and as the engines are small compared with the amount of power developed, they can be placed on light floors with safety. They are noiseless in action; the slide is actuated by means of skew-spur wheels, which works silently, and the ignition cannot be heard. As the piston is cushioned at both ends of its stroke, any slight slackness does not cause knocking in the bearings. The slide rotates, and is of such a form that about two-thirds of its surface is always exposed to the atmosphere, which keeps it cool; it is thus little affected by unequal expansion, and by a simple contrivance it is automically held gas tight, but practically without friction against its working faces. The compressed mixture is admitted to the cylinder so as to cushion the piston at the end of its exhaust stroke, and it is cut off and ignited when the piston i piston at the end of its exhaust stroke, and it is cut off and ignited when the piston is travelling rapidly, thus a greater portion of the heat developed is utilised in giving power; the crank also is at its best position for producing the minimum of friction in the bearings. The engines consume less gas than any other per actual horse-power produced, and when working under its maximum power it is arranged to consume proportionately less gas, by a simple method of enlarging the clearance space at the pumping end of the cylinder, which enables the governor to maintain absolute regularity without interfering either with the economy of the engine or its uniformity of ignition.

LIBERTY AND PROPERTY DEFENCE LEAGUE.—This league, formed to resist over-legislation, maintain freedom of contract, and to advocate individualism as opposed to socialism, entirely irrespective of party politics, in a report of its Parliamentary work to the end of the session 1884, claims to have been the means of defeating the Employer's Liability Act (1880) Amendment Bill, which sought to destroy freedom of contract, as regarded compensation for injuries, between employers and employed. It opposed, through its President (Lord Wemyss) and members with seats in both Houses of Parliament, the appointment of a Royal Commission on the Housing between employers and employed. It opposed, through its President (Lord Wemyss) and members with seats in both Houses of Parliament, the appointment of a Royal Commission on the Housing of the Working Classes; the Labourers (Ireland) Bill, for providing labourers with cottages and gardens out of the rates; the Dwelling-Houses Inspection Bill, for the compulsory inspection of all private houses by public officials, which was ultimately withdrawn; the Municipal Corporations (Borough Funds) Bill, for enab ing municipalities to promote and oppose bills without the consent of the rate-payers, ultimately withdrawn; the Bristol Corporation (Docks Purchase) Bill; and the Criminal Law Amendment Bill, which was dropped in the House of Commons. The President of the league twice unsuccessfully divided the House of Lords in favour of amendment to some of the more stringents provisions of the Canal Boats Act (1877) Amendment Bill. The Metropolitan Board of Works (Fire Brigade Expenses) Bill, designed to override an agreement previously made between the Metropolitan Board and the London fire insurance offices, which, in addition to depriving the companies of a portion of their property, proposed to benefit the non-insured at the expense of the insured, was opposed and ultimately withdrawn; and a section of the Burgh Police and Health (Scotland) Bill, the effect of which would have been to discourage insurance from fire by rendering it more expensive, was likewise opposed, and the section eventually struck out. The Tithe Rent Charge Bill for making the land. which would have been to discourage insurance from his by rendering it more expensive, was likewise opposed, and the section eventually struck out. The Tithe Rent Charge Bill, for making the landowner liable for the tithe as a common debt, and forbidding him and the tenant agreeing that the tenant should pay it, though both wished it, was opposed by a member of the League's Council in the House of Lords, and the measure was summarily withdrawn. Resolutions were passed at a meeting held by the League at St. James's Hall against the Bengal Tenancy Bill, which reproduced the worst feaagainst the Bengal Tenancy Bill, which reproduced the worst features of Irish land legislation. Successful opposition had been offered by the League to proposed legislation interfering with licensed victuallers in the conduct of their business. It was, however, unsuccessful in its opposition to the Payment of Wages in Public-Houses Prohibition Bill, which became law, but the law had since been broken and evaded, as was usual when peoples' habite and conventioned were interfered with be which all other wealth is measured. Its production is the creating of a new purchasing power, not only so far as its intrinsic value is concerned; but it is a wealth that when produced is the germ or means of producing additional wealth." The author, who is well known as a forrespondent on mining to this Journal, has compiled some very valuable information as to the yields of gold from various gold-producing countries, and the average quality of the matrix operated on. Mr. Cornish shows that the production of gold is not only a most important but one of the most profitable industries in the world, and as a basis of legitimate enterprise offers an unbounded field for the judicious and profitable investment of capital and labour. Also that on the successful development of the gold mines, and the profitable production of gold materially depends the prosperity of other industries. The author deprecates the extravagance and mismangement of so many schemes and companies got up with the shapparent object of gold mining, that have brought the industry into disfavour wholly undeserved, and says that gold mining is a business requiring special care and experience for its guidance. Mr. Cornish

charters, and tending to depreciate the value of their property with a view to their supersession by municipal monopolies, had been opposed, and were either rejected or withdrawn. Up to now between 30 and 40 of the Defence Association and companies connected with various interests have formally placed themselves in alliance with the League. Reckoning together those who have thus joined through their respective societies or companies, and those who have joined individually the League already comprises over 300,000 members.

individually the League already comprises over 300,000 members.

FIRE-DAMP DETECTOR.—At a meeting of members of the North Staffordshire Mining Institute on Monday last, Mr. W. E. Garforth read a paper "On the Fire-damp Detector," which consists of a small india-rubber ball or bag that may be elevated or carried to any part of the workings of a mine and filled with the atmosphere of the place. The test can afterwards be made. In reply to questions, Mr. Garforth said the detector could be made to apply to any kind of lamp. A vote of thanks was accorded to Mr. Garforth for his paper. Mr. F. M. Still read a paper "On the Use of Lime Cartridges as applied to the North and South Staffordshire Coal Fields," and received a cordial vote of thanks.

DEVON GREAT UNITED.—The directors' report and statement of accounts prepared for presentation at the forthcoming meeting has been issued to the shareholders. The report states that the improved condition of the mines shows the desirability of raising fresh capital for developing them thoroughly. During the last two months the returns of copper ore were 99 tons, realising 190. 15s. while the cest-sheets amounted to 477l. 8s. 4d.; thus showing a loss for the period named of 66f. 13s. 4d. only, notwithstanding the depressed prices of copper now prevailing. After carefully considering the situation the directors recommend that the company be wound-up with a view to its reconstruction, and accordingly resolutions to this effect have been prepared, and are to be submitted to the coming meeting. The directors also think from information they have received that by sinking the shat from 10 to 15 fms. deeper, and by the drivage of the level by rock-drills rich deposits of copper and mundle ore will be found, and a productive and profitable mine opened up. A favourable arrangement has been come to regarding the royalities until the mines are made to pay dividends to the members.

Died,—At his residence on the mines, Rimington, Yorkshire, on Tuesday, in his 67th year, Capt. John Borklase

Died,—At his residence on the mines, Rimington, Yorkshire, on Tuesday, in his 67th year, Capt. John Borlase, manager of the York and Lancaster United Mines, for years manager of the Cornish Consolidated Iron Mines, and formerly agent of Wheal Chiverton, near Truro, and other mines in Cornwall. Deeply regretted by a large circle of friends.

LE MOUVEMENT INDUSTRIEL BELGE.

EVUE TECHNIQUE, COMMERCIALE, ET FINANCIERE, sous la direction de Mr. l'Ingénieur P. DESGUIN. Paraîtra le 4 Juillet, 884, et successivement les Vendredi de chaque semaine. Il contiendra des articles d'actualité sur l'agriculture, la navigation, les mines, la construction, es machines, les chemins-de-fer, les canaux, les travaux publics, le droit indusriel et commercial, les inventions, et les perfectionnements, et principalement ur l'Exposition Internationale d'Anvers, dont il publiera les plans, les dessins, et documents de tous genre. r l'Exposition International.
documents de tous genre.
TEXTE ILLUSTRE DE BELLES GRAVURES.
Abonnements annuels:—Belgique, 25 francs; pays voisins, 30 francs.
B'adresser à Mr. NICOLAS FASTRE.
Ingénieur-Administrateur.

NORTON, HEBERT, AND CO. LLANELLY.

SUPPLY MINING COALS, SMOKELESS STEAM COALS, AND ANTHRACITE STEAM COALS, SMOADLESS STEAM COALS, AND
ANTHRACITE STEAM COALS, FO.B., AT LLANELLY AND BURRY PORT,
AND DELIVERED IN TRUCK LOADS AT ANY RAILWAY STATION.

FOR SALE, TWO PAIRS HAMMERED IRON MAIN CAPS, with blocks and brasses, complete, suitable for 70 or 80-inch

engine.
TWO HAMMERED IRON LINKS for underlie bob.
FOUR HAMMERED IRON RODS for fend-off bob. All new.
Particulars and price on application to the Charlestown Foundry
and Ironworks Company (Limited), St. Austell.

POR SALE, SIXTEEN CONSECUTIVE VOLUMES of the MINING JOURNAL from 1867 to 1882 inclusive. Strongly bound in Yeariy Volumes, with Index.

Apply to the Editor, MINING JOURNAL Office, 26, Fleet-street, London, E.C.

ON SALE, a 12-inch double-acting PUMP, by Mather and Flatt, in good condition; rods 200 feet long; Will lift 500 gallons per minute. Suitable for Mines, Collieries, Breweries, &c.

Apply to Ermen and Roby, Manchester.

NORWEGIAN ORES. — CHROME ORE, PYRITES, COPPER ORE, IRON ORE, COBALT, and NICKEL ORE, &c., FOR

Apply to Mr. H. T. HORNEMAN, Mining Engineer, Throndhjem,

RARE OPPORTUNITY—MINES INVESTMENT SYNDICATE.

Capital £20,000, in £10 Shares.

For Purchasing Shares in Sound Companies at low prices, and taking advantage of any rise, thereby realising large profits.

For full particulars address, Mr. John L. M. Fraser, M.E., Greenfields, Wrexham.

LOCOMOTIVES MADE AND REPAIRED.

Special sheds for overhauling and storing if required when completed.

ESTIMATES GIVEN FREE OF CHARGE.

W. G. BAGNALL, CASTLE ENGINE WORKS, STAFFORD.

NEW TERRAS MINE.

WANTED, FIVE HUNDRED SHARES, or any less number.—

State lowest price and full particulars, by letter, to THOMAS
WILLIAMS, 110, Cannon-street, London, E.C.

WANTED, a FEW CAPITALISTS to join in SECURING some very valuable GOLD MINING and LAND PROPERTIES, from which large profits can be made.

For particulars apply to THOMAS CORNISH, M.E., care of MINING JOURNAL Office, 26, Fleet-street, E.C.

A GENTS WANTED TO PUSH FIRST-CLASS MACHINERY OILS commanding a large and successful sale. Liberal

Address. " Box 201." Post Office, Liverpool.

WANTED, SECOND-HAND ROBEY'S MINING ENGINE, with not less than 12-inch cylinders. Full particulars, with lowest price and where to be seen, to be sent to W. BOUSTRED, Pontesbury, Salop.

DIAMOND BORING.

WANTED, a MAN thoroughly competent to TAKE CHARGE of DEEP BORING OPERATIONS in Spain. One who can set diamonds preferred. State experience and wages expected.

Address, "D. B.," MINING JOURNAL Office, 26, Fleet-street, E.C.

AN ENGLISHMAN (26), residing at Bilbao, DESIRES EMPLOYMENT by an English company or otherwise in Spain. Mining and general business experience; Spanish and shorthand;

Address, "Y. A.," care of Don Francisco Castilo, Bilbao, Spain.

COMMERCIAL TRAVELLER WANTED to REPRESENT a
Large House in the Lead Trade; well acquainted with buyers
in South Wales. Unexceptional references required.
Address, "Lead," MINING JOURNAL Office, 26, Fleet-street, E.C.

MINE ALLAO," "E L C A GUAYANA, VENEZUELA. 32,200 SHARES.

Gold in bars produced in the month of August, 1884, and remitted to Messrs. Baring Brothers and Co., London—15,594 12 ccs.

DIVIDEND distributed per Share, 28 francs.

(Signed) A. LICCIONI, President.

(Signed) VICTOR J. GRILLET, Treasurer.

DYNAMITE (BLEOTRIO) EXPLODERS ELECTRIC MINE BELLS.

"The Telegraph Bells and Indicators you fitted for us in 1871 are still going admirably. It is, indeed, the soundest work we have yet seen, and the trifling cost of maintenance leaves modoubt that for all Mining and Commercial purposes the Electric system holds a decided advantage over all others for efficiency and durability.'

LARGE BELL, PUSH, 50 YARDS INSULATED WIRE, and BATTERY complete on receipt of 25s. Suitable for easily communicating between distances.

communicating between distances.

Architects, Builders, Mining Engineers, Gas Fitters, and others desirous of using Electric Bells can be supplied with all the necessary stores and instructions for fitting. Estimates given for supplying and fitting Electric Bells, Lightning Conductors, Fire Telegraphs, Speaking Tubes, &c., on application. Vulcanised Indiarubber and Canvas Hose, Special Tubing for Acids, Gas, and Chemicals, Indiarubber Mats, Valves, Washers, Sheet, Rings, &c. Gutta Percha and Ebonite goods. Signals for Shafts, &c.

The Trade and Shippers supplied. Catalogue on application.

PATENT ELECTRIC GAS LIGHTER, 21s., carriage paid.
Our new PATENT ELECTRIC GAS LIGHTER, having no battery, is practically inexhaustible.

tery, is practically inexhaustible.

ELECTRIC LAMPS for TABLE or OFFICE use.

FRANCIS AND CO., EAGLE TELEGRAPH WORKS, HATTON GARDEN, E.C. MINING TELEGRAPHS ERECTED.

QUICKSILVER-WAVE AMALGAMATOR COMPANY, LIMITED. (MOON'S PATENT.)

FOR EXTRACTING GOLD FROM ITS ORES. AURIFEROUS ORES in any quantity TREATED or PURCHASED. Applications will now be received for a limited number of Shares of £10 each.

Copies of Prospectus and of new Pamphlet just issued, with sketch of Amalgamator, and record of work done during last six months, to be had by post or on application at the company's offices—

27, THROGMORTON STREET; OR AT THE WORKS-17, WHARF ROAD, CITY ROAD, E.C. HENRY BRAMALL, M.Inst., C.E.,

MINING ENGINEER, 3, BALMORAL ROAD, LIVERPOOL,

Inspects, Values, and Reports on Collieries, Mines, and Mineral Properties, and advises on all Mining matters, and the construction and erection of Mining Machinery.

THOMAS BOWEN, ASSAY OFFICE AND LABORATORY,
GLOUCESTER PLACE, SWANSEA,
OHEMIST AND ASSAYER TO
Messrs. C. H. THOMPSON and Co., Ore Merchants, London and

THE SWANSEA VALE SPELTER Co., Swansea.
THE BIRCHGROVE STEEL Co., Swansea.

TERMS, VERY MODERATE, ON APPLICATION.

WM. BREDEMEYER,

MINING, CONSULTING, AND CIVIL ENGINEER, ROOM No. 11, HOOPER ELDRIDGE'S BUILDING, MAIN STREET, SALT LAKE CITY, UTAH,

United States Mineral Surveyor for Utah and Idaho, Notary Public, Goologica Examinations, Reports on Mining Properties; Surveys Mines, Railroads, and Oanais, and Superintends the Workings of the same. Prepares Estimates and Plans for Opening and Working Mines. Expert on Mining Questions before the Courts. Address, P. O. Box, 1157, Salt Lake City, Utah.

ALEXANDER SMITH, M. Inst. C. E., CONSULTING A ENGINEER and VALUER of IRONWORKS,
MINING, RAILWAY, ENGINEERING, and other PROPERTY,
PLANT, and MACHINERY,
PRIORY STREET, DUDLEY

4, BURLINGTON CHAMBERS, NEW STREET, BIRMINGHAM

Mr. SMITH has been retained for nearly 20 years by some of the most prominent firms, and has conducted many of the largest valuations that have taken place in the kingdom. Valuations for Stock Taking or any other purpose upon very

THOMAS CORNISH, CONSULTING MINING ENGINEER.

Mines Inspected and Reported on. Advice on Mining Management and Investment.

Twenty-five years' practical experience in Australia.

Author of "Gold Mining: its Results and its Requirements"—"Our Gold Supply: its Effects on Finance, Trade, Commerce, and Industries"—"A Trip to Colorado," &c.

Address, care of Mining Journal Office, 26, Ficet-street, London, E.C

A USTRALASIAN GOLD, TIN, COPPER, COAL, ANTIMONY, and other MINES REPORTED ON for public companies or private shareholders by WILLIAM NICHOLAS, F.G.S., Lecturer on Mining, University, Melbourne, Consulting Mining Engineer, Exchange, Melbourne, Victoria, Australia.

THE CANADA PACIFIC IRON AND STEEL RAIL COMPANY.

The Subscriber is desirous of opening communication with some party in England for the purpose of organising the above company. One thousand acres of red hematite ore not far from the line of the C.P.

Address, HUBERT C. JONES, Solicitor, Brockville, Ontario, Canada. PRACTICAL MINING ENGINEER, who has had several years experience in various parts of Europe, America, and Africa, is OPEN to a RE-ENGAGEMENT. Thoroughly experienced in Rock Drills, Automatic Dressing Machinery, Pumping, Winding, Assaying, and Surveying. Speaks French and German. Unexceptional references. Age 41.

Address, "M. E.," MINING JOURNAL Office, 26, Fleet-street, London, E.C. PRACTICAL MINING ENGINEER, who has had severa

TO LANDED PROPRIETORS, ESTATE AGENTS,
SOLICITORS, AND OTHERS.
SURVEYS and PLANS of ESTATES, large or small, made at
a fixed charge of One Shilling per acre anywhere in the

Address, T. G. ALDERSON, Land Surveyor, 10, Queen's Grove

WILLIAM ELMORE (LIMITED). OFFERS WANTED for TWO, FOUR, or SIX DEBENTURES of £50 each. For prospectus of the company, see Mining Journal of May 26, 1883. No reasonable offer will be refused. Money wanted. Address, "Dynamo," MINING JOURNAL Office, 26, Fleet-street, Lordon E.C. In the High Court of Justice. PROBATE, DIVORCE, AND ADMIRALTY DIVISION.

(DIVORCE.)
To JOHN PENBERTHY, late of 23, Selby-road, Anerley, in the County of Surrey.

TARE NOTICE, that a Citation bearing date the 21st day of August, 1894, has issued at the instance of ANITA PENBERTHY, of Cheltenham, in the County of Gloucester, citing you to appear within eight days after public tinn hereof, and to answer the Petition filed by the said ANITA PENBERTHY, praying for a DISSOLUTION of HER MARRIAGE with you, the said JOHN PENBERTHY; and such Citation contains an intimation that, in default of your so doing, the Court will proceed to hear the said Petition, proved in due course of law, and to pronounce sentence thereon, your absence notwithstanding, and a further intimation that for the purpose aforesaid, you are to attend in person, or by your Solicitor, at the Divorce Registry, at Somerset House, Strand, in the County of Middlesex, and there to enter an appearance in a book provided for that purpose, without which you will not be allowed to address the Court in person, or by Counsel, at any stage of the proceedings in the Cause.

BOLTON, ROBBINS, BUSK, and CO,, 45, Lincoin's Inn fields, in the County of Middlesex, Solicitors for the Petitioner.

In the High Court of Justice.

ABERDUNA LEAD MINES (LIMITED).

THE LIQUIDATOR is prepared to RECEIVE TENDERS for the PURCHASE of the MINING RIGHTS, extending over about 150 acres, situated in the parish of Lianferres, in the county of Denbigh, close to good roads, and within easy access to Mold Station on the London and North-Western Railway, together with the

MACHINERY, PLANT, TOOLS, AND EFFECTS The mine is thoroughly equipped. Engine-shaft sunk to 125 yards. Best scovery of lead made at last level driven out from the shaft at the depth indi-

discovery of lead made at last level driven out from the shaft at the depth indicated.

Tenders will be received by Mr. WILLIAM THEORALD, the Official Liquidator, on or before Twelve o'clock on Monday, the 27th October, 1894, at the offices of Messrs. Theorald Browness and Miall., F.C.A., 27, St. Swithin's-lane, London, E.C.
Applications for Orders of Inspection of the Mines and Forms of Tender may be obtained of the Official Liquidator; and particulars and conditions of sale may be had of R. CHANDLER, Eq., Solicitor, 68, Bishopsgate-street Within, E.C.; Mr. RUPERT PRINCE, at the Mines, Mold; or of the Liquidator, WILLIAM THEORALD, Eq. (Theobald Brothers and Miali), Chartered Accountant, 23, St. Swithin's-lane, London, E.C.

TUESDAY, OUTOBER 21st, 1384, NOON. VERY VALUABLE MINE MACHINERY, PLANT, AND MATERIALS FOR SALE,

At NORTH PENSTRUTHAL MINE, in the parish of Gwennap, near Lanner, about one mile from Redruth, Cornwall.

MR. W. T. DAVEY, Auctioneer, Redruth, has been favoured with instructions TO SELL, BY PUBLIC AUCTION, on TUESDAY, October 21st next, at Twelve o'clock, at the above Mine, the WHOLE of the PIRST-CLASS

MACHINERY, PLANT, AND MATERIALS

ONE good 50 in. cylinder Cornish PUMPING ENGINE, equal beam, 10 it. atroke, with first piece of main rod; two excellent Cornish boilers, with fittings, 12 tons and 10 tons respectively.

ONE 23 in. cylinder horizontal WINDING ENGINE, 5 it. stroke (crank shaft and fiy wheel, air pump and condenser), nearly new, by Harvey and Co., with extended bed plate, and 15 in. air compressor, cylinder 6 ft. stroke; one new 18 in. air cylinder, 6 ft. stroke, to replace present one, one 10 ton Cornish boiler and fittings.

Is in air cylinder, 5 ft. stroke, to replace present one, one 10 ton Cornish boller and fittings.

ONE 31 in, cylinder STAMPING ENGINE, equal beam, 9 ft. stroke, with two excellent fly wheels, and one 10 ton Cornish boller and fittings; two nearly new stamps axies (32 heads), with came, braces, &c., complete; ten round buddles, with driving gear, stands, staye, &c.; two excellent air receivers, about 5 tons; dry tube, &c., about 3 tons; about 300 fms. of 3 in. iron air pipes, with faced flagges; one double power winch; one 4 ton boller; three 3½ in. rock boring machine drills, three stretcher bars, with clamp; one 50 ft. shears, with sheaves; three balance bobs; shaft tackle, &c.; 180 fms. rods, 12 to 7 in.; 50 fms. superior flat rods, with travelling wheels, &c., complete; 270 fms. of pitwork of various sizes, from 7 to 12 in., including H and door pieces and poles; 250 fms. 3 in. circular steel wire rope; 3C fms. of 1½ in. iron bucket rods; 200 fms. iron stave ladders; 109 fms. launders, various sizes; a quantity of staples and glands; fagotted and hammered rod piates; chain; railroad iron; smith and miners' tools; new steel and iron; wood sheds; casing planks; useful timber and other materials in general use in mines; account house furniture and other effects.

The foregoing machinery, plant, and materials will be first offered in One Lot, and if not sold will immediately be put up in Lots to suit the convenience of purchasers.

urchasers. The machinery and materials will be found in first-class working condition, and up to the stoppage of the mine the engines, boilers, &c., were maintained a thoroughly efficient working order.

The engines were regularly indicated by Messrs. Hooking and Son, and preented very good indicator diagrams.

REFRESHMENTS WILL BE PROVIDED.

To view, apply to the Agents on the Mine; and for further particulars to Mr. E. ASHMKAD, the Secretary, 2. Drapers' Gardens, London: or to the Auctioneer, 4, Station Hill, Redruth.—1st October, 1534.

GLAMORGANSHIRE SALE OF THE BITUMINOUS COAL MINES

AVAN HILL COLLIERY, bergwynvi, on the Abergwinß Branch of the Great Western Railway, with the fixed plant, tools, sidings, and appurtenances, stabling, horses, together with the machinery for making the very best first-class fire bricks.

the machinery for making the very best first-class fire bricks.

MESSRS. STEPHENSON AND ALEXANDER have been instructed by the Avan Hill Colliery Company TO SELL, BY AUGTION, on TUESDAY, the 28th day of October, 1884, at the Royal Hotel, Cardiff, at Three o'clock in the afternoon, the foregoing valuable COLLIERY PROPERTY, known as the AVAN HILL COLLIERY, Abergwynfi Valley, Giamorganshire, within easy reach of the shipping ports of Cardiff, Porthcawl, Port Tabot, Briton Ferry, Swansea, and adjacent to the Great Western Railway, with which it is connected by suitable and commodious sidings.

The area of the minerals is about 575 acres, and the section of the seam being worked averages about 4 ft. in thickness over the whole property.

The workings, which are carried on through levels, have been worked for about four years, the present output being equal to about 500 tons per week, which with a small outlay can be increased to over 200 tons per day within two months.

contibs.

The royalties are of an exceptionally low figure, being only \$d. per ton of \$50 lbs., and \$d. per ton for fire clay and building stone.

The property was taken in 1835 for a term of \$0 years, of which nearly \$0 years restill unexpired, owing to which the terms of the lease are exceptionally expensible.

are sain unexpared, owing to which the technic of the technic of the following free; a good rock provided is attained through levels, and is water and gas free; a good rock roof overlies the whole of the seam. In addition to the soal measures there is an excellent seam of fire clay, about 5 ft. thick, underneath the whole of the property, and workable by level.

The machinery, comprising a 14 in. single cylinder horizontal hauling engine, with ropes and drums and boiler complete, brick making machinery of the most modern construction, and other plant and materials, horses, sidings, smith and carpenter's shop, stabling, &c.

The Bhondda and Swansea Bay Railway, now in course of construction, passes within 3 mile of the property, and brings the colliery within 11 miles of port, the tolls upon which to Fort Talbot, Briton Ferry, and Swansea will be unusually low.

ally low.

The South Wales Mineral Rallway has a junction with the Great Western
Railway system at a distance of 3 miles from the property.

Por futher particulars apply to the Auctioneers, or to Mr. D. B. Evans, Avan
Hill Colliery, Abergwynfi, near Bridgend.

TO OIL AND CHEMICAL MANUFACTURERS. IMPORTANT SALE OF VALUABLE PREEHOLD PROPERTY

extensive premises known as ST. DAVID'S O'LI WORKS, situate at Sainey, near Chester, with managing director's and manager's houses, buildings, and erections, and opwards of 18 acres of freebold land, together with the whole of the extremely valuable plant, machinery, goodwill, and stock-in-trade, as a going concern; also a desirable FREEHOLD ESTATE at Tryddyn, near Mold, comprising a handsome residence, known as Tryddyn Lodge, with ample outbuildings, gardens, &e., farm-house and buildings, numerous cotrages, and FAT. 22. 51?. of land, including the premises known as the Tryddyn Lodge and FATM Colliseries, together with the valuable plant and machinery thereon, and the minerals underlying the same.

MESSRS. CHURTON, ELPHICK, AND CO. have received on SATURDAY, the 25th of October, 1524, the above-mentioned valuable FREE-HOLD PROFERTIES.

N.B.—Particulars, with plans, will shartle has sublished. Belonging to the Flintshire Oil and Cannel Company (Limited), comprising the extensive premises known as ST. DAVID'S Oil WORKS, situate at Saltney,

N.B.—Particulars, with plans, will shortly be published. Any further information may be had from Mr. J. TATLOCK, Solicitor to the Company, or the Auctioneers, all of Chester.

VALUABLE SLATE QUARRY.

VALUABLE SLATE QUARRY.

TO BE SOLD, the BLAEN-Y-OWM SLATE QUARRY, Festining, from which some thousands of tons of slates have been sold, together with the FULL PLANT for continuing the quarry as a going concern. This quarry has been worked for several years by a private company, who desire now to part with it as it requires more capital for its further development. The sett contains 260 acres, or thereshouts, and may conveniently be divided into two. The lease has 21 years to run, at the end of which period it is renewable for another 21 years on payment of a small fine.

For further particulars apply to W. H. GATT, Esq., Market Harborough or G. M. Dixon, Esq., Bradley Hall, Ashbourne, Derbyshire,

THE MWYNDY IRON ORE COMPANY.

BALE OF THE FREEHOLD AND LEASEHOLD PROPERTIES.

VALUABLE PLANT, MACHINERY, BIDINGS, AND RAILWAY TRUCK

WESSRS. STEPHENSON AND ALEXANDER are instructed by the Liquidator TO SELL, BY AUCTION, at the Royal Hotel, the on SATURDAY, the 25th day of October, 1884, at Half-past Three occess, the following valuable.

FREEHOLD AND LEASEHOLD HEMATITE IRON ORE MINES

FREEHOLD AND LEASEHOLD HEMATITE IRON ORE MINES,
With the POWERFUL ENGINES, and other fixed and movable plant, miny sidings, and materials, together with 90 RAILWAY WAGONS.

Lot 1.—The MWYNDY HEMATITE IRON ORE MINES, which are freeday and containing about 70 acres or thereabouts, with the powerful pumping and drawing engines, fixed and movable plant, smith's and other workshops, as mills, under manager's house, and five cottages, railway sidings, and he leaves a mills, under manager's house, and five cottages, railway sidings, and planteen necessary for the equipment of a large undertaking; also the size of the pumping and winding entensity of the equipment of a large undertaking; also the valuable BUTE MINES, which are leasehold, sightly the above, containing about 80 acres or thereabout, the whole of these being working order, and which will be offered as a going concern.

The mines have produced in recent years a large annual output of heasis iron ore of excellent quality, and there is a large quantity of ore already as which could be raised at a very low cost per ton.

The Liwynsacr Mines are held under lease for a term, of which 45 years will be under agreement for lease for the term of 21 years from 25th December, 1832.

Lot 2.—The YALUABLE HEMATITE IRON ORE MINE, known as Treesia, near Llantrissant, with the valuable pumping and other engines, fixed an movable plant, railway sidings, &c.

This will also be offered as a going concern.

The property is leasehold, containing about 520 acres or thereabouts, shell is a term of which 29 years will be unexpired on 18t January, 1835.

These mines have produced during the last three years a large annual output of hematite iron ore, showing by analysis a large percentage of iron, and prefered on the produced of the manufacture of all the first of the produced o

BWANSEA, SOUTH WALES.

IMPORTANT SALE OF THE SWANSEA COMPLEX OR COMPANY'S WORKS. WITH EXCELLENT RAILWAY ACCOMMODATION, AND A PLENIFG. SUPPLY OF GOOD WATER.

MR. JOHN M. LEEDER has received instructions from Mr.
HENRY DEVER, the liquidator, to SELL BY PUBLIC AUCTION, at the
Mackworth Arms Hotel, Wind-street, Swansea, on TUESDAY, the 28th of
October, 1834.

October, 1834.

PARTICULARS.

Lot 1,—All that costly and newly-created WORKS and PREMISES known the SWANSEA COMPLEX ORE WORKS, situate at Liwyn Cwm, in the parish of Liansamlet, containing about 10 acres.

And also a Site for pumping water on Tir Felin Newydd, comprising about perches, with the right to lay down conduit pipes to convey water to live Cwm Upper Pond.

And also a Flece of Marsh Land, containing about 10 acres, to be used a tipping ground.

And also a Piece of Marsh Land, containing about 10 acres, to be used as tipping ground.

And also a Piece of Land, containing about 4 acres, situate at or by User.

Own Upper Pond, with the right to erect furnaces, engines, and other wind and cottages, stables, and other erections; together also with certain livers and powers granted by the leases mentioned below.

The works were built at a cost of £25,000, of the best materials, and srin every way well adapted for the manufacturing of sulphuric acid on a large scale, and the after-frestment of the burnt pyrites by the best methods for the extraction of the copper contained therein, for which special arrangement must be made with the landlord; or they could be easily adapted for Sed Works, for the manufacturing of steel bars in conjunction with a fin flate Manufactory, or for Glass Works, or for almost any kind of works.

The fixed and movable plant and machinery, railways, &c, are included in this Sale, and are of considerable value.

The above property is held under two leases from the Right Honourble the Earl of Jersey, ones for a term of 30 years from the 24th June, 1990, and the coher for a term of 79½ years from the 25th December, 1890, as yearly rest amounting to £25f for the first seven years, and £28f for the remainder of the term, payable quanterly.

The minerals, with rights of working the same, are reserved, and certain shar reservations and exceptions are contained in the leases.

Opples of the leases will be produced at the offices of Messre, Gastin and first.

SALE TO TAKE PLACE AT 3 O'CLOCK IN THE APTERNOON. For plans, particulars, photographs, and conditions of sale, apply to Mem. GASKOIN and FRY, solicitors, Temple-street, Swansea; Mr. H. Dryn, 4, Lobbury, London; or to the Auctioneer, at his office, Oxford Chambers, Oxford street, Swansea.

F O R S A L E :—
TWO GOOD WINDING ENGINES, each with cylinder 15½ in discover, 2 ft. 7 in, stroke, with drump, brake, and reversing gear.

ONE disto, with cylinder 20½ in diameter, 4 ft. stroke, with fly whelsal engaging according according to the cylinder 20½ in diameter, 4 ft. stroke, with fly whelsal engaging according to the cylinder 20½ in diameter, 5 ft. stroke, with fly whelsal engaging according to the cylinder 20½ in diameter, 5 ft. stroke, with fly whelsal engaging according to the cylinder 20½ in diameter. versing gear. ONE ditto, with cylinder 15 in. diameter, 20 in. stroke, drum brake, and reversing gear.
TWO BEAM CONDENSING ENGINES, each with cylinder 21 in diamer.
It is troke, nozales, side pipes, and double beat valves.
ONE STEAM SHEARING MACHINE, with cylinder 2 in, diameter, 1 in.
stroke, to cut bars up to 3 in. x2 in. at 20 strokes per minute.
Also a large quantity of PIPES and other OOLLIERY MATERIAL.
For further particulars and to view, apply,—
THE COALBROOKDALE COMPANY (LIMITED),
SHROPSHIRE.

POR SALE, at BRENDON HILLS MINES:ONE 28 inch cylinder PUMPING and WINDING ENGINE, strik
9 feet, with fly wheel, winding gear attached, with one 12 ton boiler.
Also ONE 25 inch oylinder PUMPING and WINDING ENGINE, stroke 1 fect
by 7, with fly wheel, winding gear attached, with one 10 ton boiler fitted will
Galloway tubes. Galloway tubes.

Any further information may be obtained from Capt. HENRY SKEWIS, Brester
Hills Mines, Washford, Taunton.—Dated March 12, 1834.

POR SALE—Owing to the death of the proprietor—a SILVER-LEAD MINE in Norway, situated about 14 English miles from a sea-port town on the south coast. The ore yields from 150 to 200 oz. of silver per ton of lead. The mine is clear of water, and the machinery, &c. are in first-class order, and can be started at any time.

Apply to Mr. Thos. Ware, Stonecroft Mine, Fourstones, North-suberland.

TO PERSONS GOING ABBOAD.

FOR SALE, SPLENDID MEDICINE CHEST, good condition, cost five guineas new. To be sold, completely stocked, by a medical man, for 60s.; unstocked, 30s.

Apply, Secretary, Miners' and Mechanics' Institute, St. Agns.

STANDARD ORE CRUSHER-UNIVERSAL PULVERISES. FOR SALE, the STANDARD ORE CRUSHER, 12×6, with Elastio Steel Connecting Rod.

Also, ONE 20 inch UNIVERSAL PULVERISER. Will reduce to powder any refractory material, wet or dry, Tin Ores, Quarit, &c.

Apply,-C. E. HALL, STANDARD IRONWORKS, SHEFFIELD.

IMPORTANT TO MINE OWNERS.

FOR SALE, a PLANT of ROCK-DRILLING MACHINERY, quite new, comprising—
ONE AIR-COMPRESSING ENGINE, with 12 inch cylinders,
3 and 31 in. rock drills, stretcher bars, &c., &c. Our Machines have
been driving levels in hard fock 3 to 4 fathous per week forward.
Contracts undertaken.

Address,-WARSOP AND HILL, NOTTINGHAM.

PIT SINKING, WINDING COAL, PUMPING, &c. PORTABLE STEAM ENGINE FOR SALE, 25-horse power, with or without link motion reversing gear; a 14-horse power

Ditto, also gear to wind and pump.

A 9 H. P. VERTICAL STEAM ENGINE, with link motion reversions gear (winding dram if required).

A 6 ft. pan MORTAR MILL, VERTICAL ENGINE, and BOILER combined, on carriage and travelling wheels.

Apply to-BARROWS AND STEWART, ENGINEERS, BANBURY.

1884

UIDATIO! ERTIES

AY TRUCK!

IRON

X ORE

known as

to Livya

tesed as a

by Llwyn ier works Libertles

nd are in n a large s for the

fudet in shie the and the ly reads r of the

în other

n. die

NOBEL'S DYNAMITE



Manufactured and sold by EXPLOSIVES COMPANY, (FORMERLY THE BRITISH DYNAMITE COMPANY LIMITED), NOBEL'S EXPLOSIVES LIMITED

Head Office: 149, West George Street, Glasgow. EXPORT AGENTS: JAMES THORNE AND CO., 85, GRACECHURCH STREET, LONDON, E.C.
FACTORIES—ARDEER WORKS, STEVENSTON, AYRSHIRE.
WESTQUARTER WORKS, POLMONT STATION, STIRLINGSHIRE.
REDDING MOOR WORKS, POLMONT STATION, STIRLINGSHIRE.

POWDER, COTTON

IS RECOMMENDED TO CONTRACTORS, MINERS, PIT SINKERS, QUARRYMEN, AND OTHERS, AS BEING
THE SAFEST, CHEAPEST, AND STRONGEST OF ALL EXPLOSIVES
TONITE is the most efficient and economical blasting agent ever invented, and is largely in demand. It does not contain any
Nitro-glycerine, and is, therefore, exempt from the dangers of exudation, or of freezing and its attendant process of thawing.

The Company manufacture

PATENT DETONATORS

PATENT DETONATORS

of a quality much superior to the foreign article. Also supply Safety Fuse and Electric Firing Appliances of best description.

The trade supplied on favourable terms.

ADDRESS—THE COTTON POWDER COMPANY (LIMITED)

23, QUEEN ANNE'S GATE, LONDON, S.W.

WORKS: FAVERSHAM, KENT.

WORKS: FAVERSHAM, KENT.

Agents: Dineen and Co., Leeds; David Buens, Haltwhistle; R. J. Cunnack, Helston, Cornwall; J. and W. Smith, Chapel-en-le-Frith; W. Veitch, Jedburgh, N.B. W. Harrison, Barrow-in-Furness; Hunter and Fotheringham, Glasgow.



OF THE GREATEST STRENGTH ALLOWED BY THE EXPLOSIVES ACT.

OFFICES.—

1, Coleman Street Buildings, Moorgate Street, London, E.C. London AGENT,—E. KRAFTMEIER & CO., 5, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.



MANUFACTURED AND SOLD BY THE

DYNAMIT-ACTIEN-GESELLSCHAFT VORMALS ALFRED NOBEL & CO., HAMBURG.

Formerly ALFRED NOBEL & CO.

Factories { KRÜMMEL AND SCHLEBUSCH, IN GERMANY. ZAMKY AND PRESBURG, IN AUSTRIA HUNGARY.

LONDON OFFICE: 42, BASINGHALL STREET, E.C. Penn., which are the Purest in the World, making a Soft,

BRAUN AND BLOEM'S

DETONATORS-"EAGLE" BRAND.

REGISTERED



TRADE MARK.

The most powerful Detonating Caps for exploding Dynamite, developing its fullest strength. PACKED IN THEIR PATENT TIN BOXES.



No. 8665 PATENT

A new invention, doing away with the very dangerous operation generally in use of inserting cutting tools when it is necessary to open the outer tin box.

Shipments effected from LONDON Stock also from ANTWERP or HAMBURGH.

Sold by WM. BRODERSEN, 79, Leadenhall-street, London, E.C.

d Practical Suc of Engines.



odel exhibited by this Firm

HARVEY AND CO.

(LIMITED) S AND GENERAL MERCHANTS. HAYLE, CORNWALL. ENGINEWRS

LONDON OFFICE .-- 186, GRESHAM HOUSE, R.C.

PUMPING and other LAND ENGINES and MARINE STEAM ENGINES of the largest and most approved kinds in use, SUGAR MACHINERY, MILLWORK, MINING MACHINERY, and MACHINERY IN GENERAL.

SHIPBUILDERS IN WOOD AND IRON.

MANUFACTURES OF

HUSBAND'S PATENT PNEUMATIC STAMPS.

SECOND-HAND MINING MACHINERY FOR SALE,
IN GOOD CONDITION, AT MODERATE PRICES—viz.

PUMPING ENGINES; WINDING ENGINES; STAMPING ENGINES, STEAM CAPSTANS; ORE CRUSHERS; BOILERS and PITWORK of various sizes and descriptions: and all kinds of MATERIALS required for MINING PURPOSES

BEST METAL FOR BUSHES, BEARINGS, SLIDE VALVES,

And other wearing parts of Machine PUMPS, PLUNGERS, CYLINDERS, &c.

PHOSPHOR BRONZE WIRE, TUBES SHEET, RODS TOOLS &c STEAM

UNDER PATENTS.

PHOSPHOR BRONZE COMPANY, LIMITED,

SUMNER STREET, SOUTHWARK, LONDON, S.E.

WILLIAM BENNETTS. PATENT MINERS'



SAFETY FUSE MANUFACTURER.



This manufacture embraces all the latest improvements for use in Blasting in Mines, Quarries, or for Submarine Purposes; and is adapted for exploding Gunpowder, Dynamite, or any other Explosive; and is made suitable for exportation to any part of the world. Price Lists and Sample Cards on application.

All communications to be addressed—

ROSKEAR FUSE WORKS, CAMBORNE CORNWALL.

MACDERMOTT AND GLOVER'S PATENT PERCUSSIVE ROCK PERFORATOR

(IMPROVED) FOR HAND-LABOUR ONLY, IN HARD ROCK.

FOR MINES, QUARRIES, AND GOVERNMENT CONTRACT WORK RATE OF PENETRATION IN GRANITE,

11 to 2 inches per minute. Price £50 complete.

For full particulars, apply to

GLOVER & HOBSON,

ENGINEERS & MILLWRIGHTS, ALBERT IRONWORKS, ST. JAMES'S ROAD, OLD KENT ROAD, LONDON, S.E.,

M. MACDERMOTT, 25 and 26, Pudding Lane, London. N.B.—A machine can always be seen at work (without notice) at the Albert Ironworks. [TELEPHONE 4664.]

BERGEN PORT SPELTER.

We are the exclusive owners of All the Mines producing the famous LEHIGH ZINC ORES of the Lehigh Valley, Ductile Spelter, Free of Lead and Arsenic, superior in all respects to any other made, and especially adapted for the manufacture of

Cartridge Metal, German Silver, Castings, AND ELECTRICAL PURPOSES

BERGEN PORT ZINC CO.

E. A. FISHER, Agent,

21, STATE STREET, Opposite Battery Park, NEW YORK.

THE NORTH WALES COAL FIELDS,
Being a series of Diagrams showing the Depth, Thickness, and Local Names
of the Seams in the principal Collieries of the various districts, with Index, Geological Map, and horisontal sections across the Ruabon, Brymbo, Buckley, and

Mostyn districts.

By JOHN BATES GREGORY and JESSE PRIOE,
of Hope Station, near Mold, Flintshire.

Price: Mounted on holiand, coloured and varnished, and fixed on mahogany
rollers, 30s. each; or in book form, 12×9, mounted and coloured, 25s. each.
May be obtained, by order, of all Booksellers, or direct from the MiningJOURNAL Office, 26, Fleet-street, London, E.C., upon remittance of Post Office
Order for the amount.

vd bet e

THE MINING SHARE LIST.

NON-DIVIDEND BRITISH MINES.

BRITISH DIVIDEND MINES.	Shares. Paid. Last wk. Clos.pr Shares. Shares. Paid. Last wk. Clos.pr Shares. 100
Sagres. Part Last well. Clos. pr. Total divs. Part Last pd.	Single Hills t, c, St. Agnes
10243 Devon Gt. Consols, c, a, Tavistock*† 1 0 0 234 234 234 234 118 7 0 0 6 3 Dec. 1880 4700 Dolcoath, c, t, Camborns 10 14 10 634 67 68 33 18 0 1 10 0 Mag. 1834 8400 East Pool, t, c, Illogan 0 9 9 39 38 39 40 15 6 1 0 0 Mag. 1834 12000 Great Holway, t, Flintshire 5 0 0 0 12 0 0 7 6 68pp. 1833 15000 Great Laxov, t, late of Man** 4 0 0 944 814 914 30 8 0 0 5 0 0ct 1834	20000 Bwich United,* f, Oardigan
6400 Green Hurth, f. Durham* 0 8 0. 4½ 4 4½ 4 16 0 0 5 0 July 1884 9830 Gunnishke (Clitters), f. c 2 2 0 ½ ½ ¼ 0 19 9 0 2 0 Mar. 1882 2800 Islee of Man, f. 1slee of Man* 25 0 0 — 33 5 0 1 0 Sept. 1830 6000 Killifreth, f. Chacewaten 4 11 6 ½ ½ ¾ 0 14 6 0 2 0 Nov. 1833 20000 Leadhills.* f. Langraphire 6 0 0 134, 134 136 1 7 0 0 1 6 Sept. 1889	1000 Collisoombe Consols, c, b, Lamerton 0 2 6 4
2500 Levant, c, t, St. Just 11 0 0 0 2 6 0 2 6 0 1884 400 Lisburne, t, Cardiganshire 18 15 0 615 0 0 615 0 0 June 1883 10000 Melhanear, c, Hayle 2 0 0 1 34 1 2 4 3 0 0 6 Jan. 1884 3000 Minera Mining Co., t, Wrexham 5 0 0 7 5 7 68 14 2 0 2 6 Aug. 1884 20000 Mining Co., of Feland, ct, c, t, 7 7 0 0 146, 1 134, 24 0 0 0 2 6 Jan. 1880	5000 Creigiog, **, b) Denbighshire
11829 North Hendre, i, Wales	12000 Dewent, * Durham
South Parren, l. Cardigan*	12000 Devon Friendship,*c, ars, Tavistock 1 0 0 3s
1200 Wheal Agar, t, Hogan	2550£ East Roman Gravels, **I. Salop 1 0 0 8000 South Tolearne, t, c, Camborne 5 11 6 2048 East Van, t, Linidloes* 5 0 0 2048 East Wheal Covell, t, Helston 0 3 6 34 14 34 30000 South Wheal Gross, t, Illogan 7 4 6 2 100000 East Wheal Rose, **a-t, Newlyn East 1 0 0 34 34 36 30000 Standard, **t, bt., Llanvest 1 0 0 1 25000 Ecton, **c, Wetton 1 0 0 1 24 25 4 40000 Tamar, **s, Bearalston** 1 0 0 1
FOREIGN DIVIDEND MINES. 35500 Alamillos, I, Spain*	25000 Ecton, *c, Wetton
FOREIGN DIVIDEND MINES. 35500 Alamillos, I, Spain*f	32000 Goginan, * i, Cardiganshire
85000 Colorado United, *-f Colorado*f 5 0 0 234 134 2 3 14 8 0 1 0 May 1883 50000 Copiapo, c, Ohili* (24 shares)! 3 10 0 234 234 2 234 2 15 3 0 1 0 Sept. 1884 70000 English & Australian, *fc, 8. Aust 2 10 0 3 2 9 0 1 0 Max 1884 2000 EngAus., g, Vict.* pref. (20000 o) 1 0 0 0 3 8 0 3 8 0 7 1882 25000 Portuna, & Spain*ft 2 0 0 3 2 25 334 8 14 3 0 2 10 Sept. 1884	6000 Great West Chiverton, l, St. Agnes. 0 6 6 36
72000 Frontino & Hollvia, g, New Gran.* 2 0 0 \(\frac{4}{3} \). \(\frac{5}{3} \). \(\frac{7}{3} \). \(\frac{1}{2} \). \(0 \) \(0 \) \(1 \) \(0 \). \(\frac{1}{2} \) \(0 \). \(0 \) \(1 \) \(0 \). \(0 \) \(0 \) \(1 \) \(0 \). \(0 \) \(0 \) \(1 \) \(0 \). \(0 \) \(0 \) \(1 \) \(0 \). \(0 \) \(0 \) \(1 \) \(0 \). \(0 \) \(0 \	8400 Hardshins,** l. Westmore. (10s. sh.) 0 7 6 1 1 12000 Herodefoot, l. near Liskeard 1 1 8 0 1 12000 Herodefoot, l. near Liskeard 2 1 8 0 1 12000 Herodefoot, l. near Liskeard 3 1 8 0 1 1 12000 Herodefoot, l. near Liskeard 4 1 1 8 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
300000 Montana, *g. *s. V.S.A	15000 Lady Ann, * s-i, Llanarmon 1 0 0 20000 W. Pateley Bridge, f, Yorkshire 1 0 0 15000 Llandegia, * i, Wales 1 0 0 12000 West Phenix, t, Linkinhorne 1 5 0 12000 West Policeon, t, t, Linkinhorne 1 5 0 12000 West Policeon, t, t, Linkinhorne 1 0 0 .
100000 Port Phillip, g. Clunes*' (&2 shares) 1 0 0 \$\frac{1}{2}\$ \$\frac{1}{2}\$ \$\frac{1}{2}\$ 0 0 10 Feb. 1881 50000 Bara Fortuna, ** g. Argent. Republic. 1 0 0 3 0 0 1 0 10 1 0 11 182 54000 Richmond Consol., **, Nevada*† 5 0 0 4 3\frac{1}{2}\$ 4 14 18 6 0 5 0 Aug. 1883 24532 Rio Tinto, *c. Mortgage Bds., Huelva.100 c 0 100 93\frac{1}{2}\$ 5 per ceut Apr. 1884 225000 Ditto, shares	\$12 Lovell, t, weindron 7 10 6 3 8 5 8 5 8 8 5 8 8 8 8 8 8 8 8 8 8 8 8
12000 Schwabs Gully, 4, Kimberley 10 0 1. 54 8 1 0 12 0 1. June 1884 12000 Schwabs Gully, 4, Kimberley 10 0 0. 54 6 54 6 2 6 . 0 10 0 . June 1884 12000 Schwabs Gully, 4, Kimberley 10 0 . 24 25 25 25 25 20 0 0 . June 1884 2250 Sterra Buttes, 7, California*; 2 0 0 15 13 15 20 0 0 6 . Oct. 1884 2250 Sterra Buttes, 7, California*; 2 0 0 15 13 15 15 20 0 6 . Oct. 1884	2400 New Gook's Kitchen, t, Hiogan 10 5 5 13 14 21 255 W. Goomf., k No. Tree., t, c, Gwennap 2 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0
253000 St. John del Rey* (£5 Stock and multiple dealt in) 65 75 5 p.e. for half-year, June 1882 160000 Tharsis, *c, sut, Spain (57330 issued) † 2 0 54 5 10 0 0 6 0 4 4.0 g. 1882 255000 Tharsis, *c, sut, Spain (57330 issued) † 2 0 54 55 6 18 6 0 11 0 May 1883 14000 Tolima, *g, s, Colombia (& shares) 5 0 0 54 55 6 34 5 12 4 0 5 10 Sept. 1884 6000 Ditto (B shares) 5 0 0 5 4 5 5 12 4 0 5 10 Sept. 1884	2400 New Gook's Kitchen, c, Illogan 10 5 6 1½ ½ 1 2585 W. Comf., k No. Tree., c, Gwennap 2 2 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
25000 Victoria* (London), g, Australia 1 0 0 5/6 5/6 0 13 10 0 0 8Feb. 1881 124221 United Mexican, *11 s, Mexico 9 17 6 5/8 3/4 3/4 0 2 6 0 2 6 May 1884	12000 New West Caradon, c, Liskeard
100000 Victorine (Nevada, U.S.) Deb. Eds 1 0 0 0 2 0 0 0 6June 1832 15000 Western Andes, 5. Colombia 5 0 0 5 4½ 5 4 16 3 0 10 8Apg. 1834 2100 W. Prussian (5500 pref. sb. £10 pd.) 10 0 0 4 2 0 0 8 0Apr. 1881	Worth Charitan #/ Cardisanahiya 1 0 0
Have made calls since last dividend was paid.	25000 North Goginar, 74, Cardiganshire 1 0 0 4 4 54 8-400 North Greec Hurth, 8 1 0 0 4 4 54 25000 North Grogwinion, 8-4, Cardigshr 1 0 0 34 34 54 25000 North Grogwinion, 8-4, Cardigshr 1 0 0 34 34 54
NON-DIVIDEND FOREIGN MINES: FOREIGN	AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE, FINANCIAL AND INVESTMENT COMPANIES, &c.
NON-DIVIDEND FOREIGN MINES; FOREIGN COMPANIES; GAS, IRON AND COAL	AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE FINANCIAL AND INVESTMENT COMPANIES, &c.
NON-DIVIDEND FOREIGN MINES; FOREIGN COMPANIES; GAS, IRON AND COAL	AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE FINANCIAL AND INVESTMENT COMPANIES, &c.
NON-DIVIDEND FOREIGN MINES; FOREIGN COMPANIES; GAS, IRON AND COAL	AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE FINANCIAL AND INVESTMENT COMPANIES, &c.
NON-DIVIDEND FOREIGN MINES; FOREIGN COMPANIES; GAS, IRON AND COAL	AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE FINANCIAL AND INVESTMENT COMPANIES, &c.
NON-DIVIDEND FOREIGN MINES; FOREIGN COMPANIES; GAS, IRON AND COAL	AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE FINANCIAL AND INVESTMENT COMPANIES, &c.
NON-DIVIDEND FOREIGN MINES FOREIGN COMPANIES GAS, IRON AND COAL	AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE Limited Liability Companies; f quoted on the Stock Ro Limited Liability Companies; f quoted on the stock Ro Limited Liability Companies; f quoted on the stock Ro Limited Liability Companies; f quoted to the stock Ro Limited Liability Companies; f quoted to the stock Ro Limited Liability Companies; f quoted to the stock Ro Limited Liability Companies; f quoted to the stock Ro Limited Liability Companies; f quote
NON-DIVIDEND FOREIGN MINES; GAS, IRON AND COAL NON-DIVIDEND FOREIGN MINES; GAS, IRON AND COAL NON-DIVIDEND FOREIGN MINES. Paid. Clos pr. Shares. Paid. Clos pr. 10000 Akankno, g. Gold Get. (100000 less.) 1 0 0 1/4 2/4 2000 Arendal, c. Norwsy	Shoon North Groginar, F., Cardiganshire 1 0 0 5 4 5 4 1
NON-DIVIDEND FOREIGN MINES; GAS, IRON AND COAL NON-DIVIDEND FOREIGN MINES; GAS, IRON AND COAL NON-DIVIDEND FOREIGN MINES. Paid. Clos pr. Shares. Paid. Clos pr. 10000 Akankno, g. Gold Get. (100000 less.) 1 0 0 1/4 2/4 2000 Arendal, c. Norwsy	Shoon North Groginar, F., Cardiganshire 1 0 0 5 4 5 4 1
NON-DIVIDEND FOREIGN MINES; GAS, IRON AND COAL NON-DIVIDEND FOREIGN MINES; GAS, IRON AND COAL NON-DIVIDEND FOREIGN MINES. Paid. Clos pr. Shares. Paid. Clos pr. 10000 Akankno, g. Gold Get. (100000 less.) 1 0 0 1/4 2/4 2000 Arendal, c. Norwsy	Shoon North Groginar, F., Cardiganshire 1 0 0 5 4 5 4 1
NON-DIVIDEND FOREIGN MINES; Sheres. NON-DIVIDEND FOREIGN MINES; Fund. Clos. 77. 20000 Akankoo,* 9. Gold Cat. (100000 lss.): 1 c 0 1/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5	15000 North Grogenary
NON-DIVIDEND FOREIGN MINES; Sheres. NON-DIVIDEND FOREIGN MINES; Fund. Clos. 77. 20000 Akankoo,* 9. Gold Cat. (100000 lss.): 1 c 0 1/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5	15000 North Grogenary
NON-DIVIDEND FOREIGN MINES GAS, IRON AND COAL	1800 North Grogerinion, 1-4, Oardignshire. 1 0 0 5
NON-DIVIDEND FOREIGN MINES; FOREIGN COMPANIES; GAS, IRON AND COAL NON-DIVIDEND FOREIGN MINES. Steres. Paul. Clos. Paul.	1800 North Grogerinion, 1-4, Oardignshire. 1 0 0 5
NON-DIVIDEND FOREIGN MINES FINANCIAL AND INVESTME Starts S	Second Registrate
NON-DIVIDEND FOREIGN MINES FINANCIAL AND INVESTME Starts S	Second Registrate
NON-DIVIDEND FOREIGN MINES FINANCIAL AND INVESTME Stares FINANCIAL AND INVESTME FINANC	Second Registrate